

# GRAIN & FEED JOURNALS

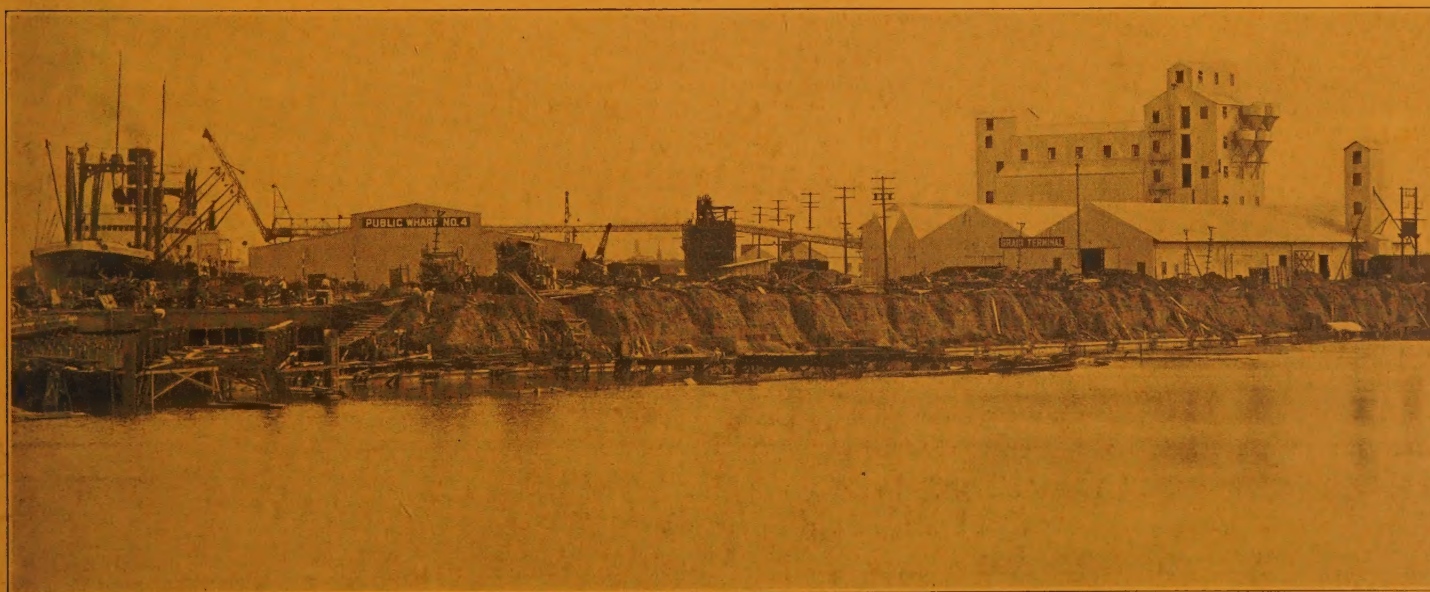
## CONSOLIDATED

*A Merger of Grain Dealers Journal, American Elevator & Grain Trade, Grain World and Price Current-Grain Reporter*

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Port of Stockton Grain Terminal and Warehouses  
[For description see page 129]



# Directory of the Grain Trade

In Organized Markets Only Members of the Local Grain Exchange Will Be Listed

*HAVING YOUR name in this directory will introduce you to many old and new firms during the year, whom you do not know or could not meet in any other way. Many new concerns are looking for connections, seeking an outlet or an inlet, possibly in your territory. It is certain that they turn to this recognized Directory, and act upon the suggestions it gives them. The cost is only \$10 per year.*

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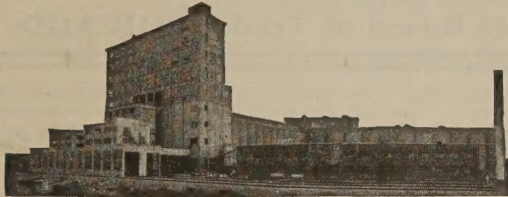
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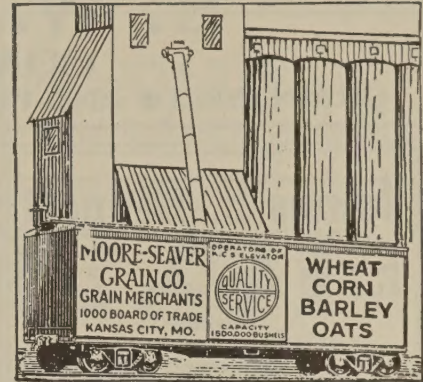
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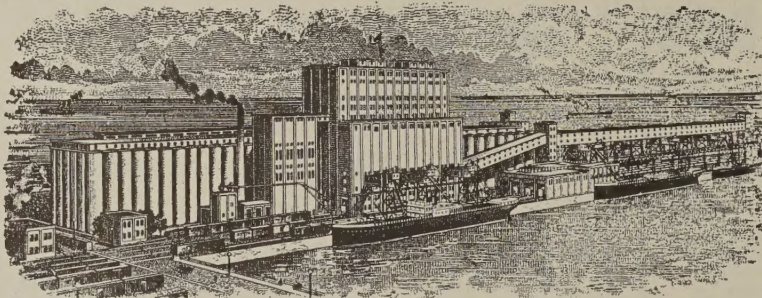
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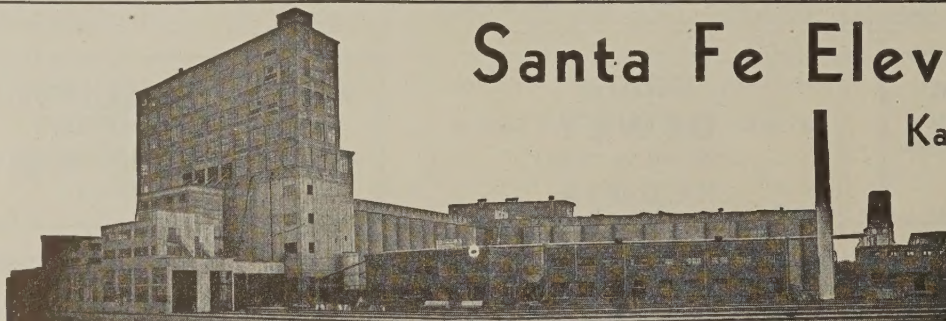
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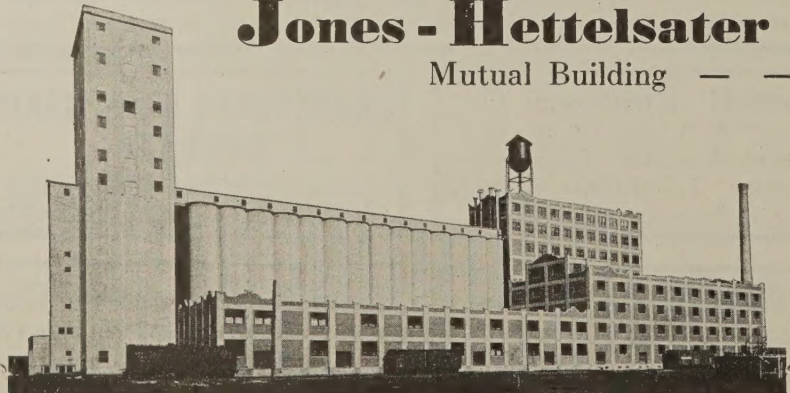
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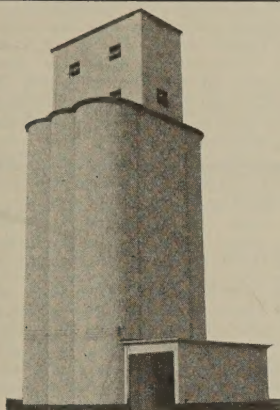
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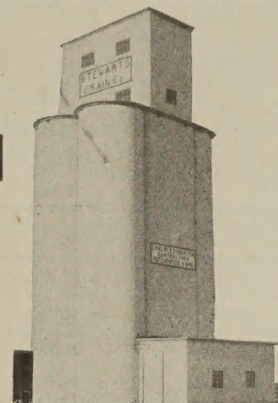
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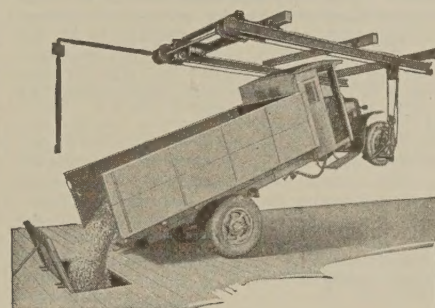
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With this dump the vehicle can be raised until some part of it will come in contact with the ceiling, which is a great advantage in driveways having a low ceiling. All parts in plain view and under complete control of the operator at all times. Sufficient power so it can be stopped and started at will. Hundreds in use and fully guaranteed.

For prices, plans for installation, and descriptive circular

Address to

L. J. McMILLIN

525 Board of Trade Bldg.  
INDIANAPOLIS, INDIANA

### The Grain Trade's

accepted medium for "Wanted" and "For Sale" advertisements is the semi-monthly Grain & Feed Journals Consolidated.

There is no better time to advertise than the present. Better start before your competitor. Write the JOURNAL today.



# Wanted and For Sale

The rate for advertisements in this department is 25 cents per type line each insertion

## ELEVATORS FOR SALE

**CENTRAL IOWA**—30,000 bushel elevator for sale; good grain territory; also handle coal. Write 76A3 Grain & Feed Journals, Chicago, Ill.

**INDIANA**—Modern 1924 elvtr., Fairbanks truck scale & McMillin dump, Richardson Auto. scale. Bargain. 76A2 Grain & Feed Jnls., Chicago.

Whenever there is a real opportunity of interest in the grain trade, it is usually registered in the "Wanted—For Sale" columns of the Journal.

**INDIANA**—Grain elevator for sale on Penna. R.R. near Peru. Fine location; good general farming terr. For information write A. P. Flynn, Receiver, 1st National Bank, Peru, Ind.

On the other end of the Journal's "Wanted—For Sale" columns you will find 9,000 grain dealers anxious to know what you have for them.

**MINNESOTA**—125,000 bus. iron clad frame cleaning and transfer elevator for sale, electric power, fast handling, good cleaner equipment, Northwestern road, a good transit point, and in good barley territory. Real bargain price. Banner Grain Co., Minneapolis, Minn.

**KANSAS** Elevator practically sold after three insertions. Here's what the advertiser writes: "We enclose check for three insertions of our ad. We have had more than a dozen inquiries from our ad and believe that we will be able to effect a sale." This proves conclusively the value of a Journal Want-Ad.

**CENTRAL INDIANA**—25,000 bus. grain elevator for sale, completely equipped for handling grain, grinding and feed mixing. Large territory and doing excellent business. Reason for selling is to devote more time to other business. Price \$22,500. Will accept part cash and terms on balance. Address 76C8 Grain & Feed Journals, Chicago, Ill.

**BARGAIN IF TAKEN AT ONCE**—Some one is always looking for an elevator at a good grain point and reads these ads just like you're doing now, so if you wish to dispose of your present property, enlarge your present interests, or embark in the grain business, USE these columns to your best advantage just as others are doing. WE WILL assist you in the composition of copy free. We are in business to be of service to YOU. There is no wrong time to put an ad in the columns of the Journal. TRY IT.

## ELEVATORS FOR SALE

**ILLINOIS**—45,000 bus. concrete elevator for sale on Santa Fe R. R. Address Box 347, Galesburg, Ill.

**INDIANA**—70,000 bu. cribbed elevator for sale in corn and oats section of Western Ind. Own site. B/4 R. R. Good price for quick sale. Address 76C2 Grain & Feed Journals, Chicago.

**WISCONSIN**—Grain elevator, feed and seed business for sale. Located in rich agricultural section. Good barley territory. Elevator capacity 10,000 bus. Warehouse, 35x150 ft. On Milwaukee road tracks. Cleaning machinery. Write T. H. Cochrane Co., Portage, Wis.

**SOUTHEASTERN WYO.**—25,000 bus. grain elevator in a good town and a good location for sale or lease. Owner has been sick and unable to attend to business for some time. Would like to sell if possible. Price and terms reasonable. W. O. Eaton, Torrington, Wyo.

## ELEVATORS WANTED

**LARGE SIZE ELEVATOR** Wanted, Illinois, Indiana or Ohio. O. Hunter, 803 Fifth St., North, St. Petersburg, Florida.

IF YOU DO NOT find the elevator you want advertised, place your wants in the "Elevators Wanted" section and you will receive full particulars regarding many desirable properties not yet advertised.

## FEED MILL AND ELEVATOR FOR SALE

**NO. MISSOURI**—Feed mill whse. with tile elevator fully equipped, grinder, mixer, seed cleaner, going feed business in good territory for sale or trade. 76C1 Grain & Feed Jnls., Chgo.

**NO NEED FOR FORMALITIES**—You don't need an introduction to Journal Want-Ads. They will help you without, whatever your problems may be.

## SEEDS FOR SALE

**SEED CORN**, German Millet, Sweet Clover Seed for sale. Home grown first quality seed. Allen Joslin Seed Farm, Holstein, Iowa.

## SAMPLE ENVELOPES

**SAMPLE ENVELOPES—SPEAR SAFETY**—for mailing samples of grain, feed and seed. Made of heavy kraft paper, strong and durable; size 4½x7 inches. Have limited supply to sell at \$2.35 per hundred or 500, \$10.00 plus postage. Sample mailed on request. Grain & Feed Journals, 332 S. La Salle St., Chicago, Ill.

## HELP WANTED

**MEN WANTED**—Feed mill machinery salesmen. 74J6 Grain & Feed Journals, Chicago, Ill.

**COMPETENT AND EXPERIENCED** elevator managers, foremen, bookkeepers, auditors, second men and solicitors can easily and quickly be found through an ad in the "Help Wanted" column of the Grain and Feed Journals, Consolidated, Chicago, Ill.

## SITUATION WANTED

**POSITION WANTED** as manager of grain, feed and seed elevator with coal; years of experience; good references furnished. Write 76C13 Grain & Feed Journals, Chicago, Ill.

**CONNECTION WANTED** with wheat, corn or cereal mill now operating in the red or in financial difficulties. Replies from bankers, bond holders, committees, etc., invited. Address 76D9 Grain & Feed Journals, Chicago, Ill.

**STOP! READ! THINK!** One advertiser writes, "Your service brought me 24 replies." We can do the same for you. Don't wait, write now.

## BUSINESS OPPORTUNITIES

**FOR SALE**—Coal Yard—Galesburg, Mich.; Grain & Coal Business—Scotts, Mich.; Transfer Elevator—Edwardsburg, Mich. White Sales Corp., Scotts, Mich.

**WHATEVER** your business may be, it will find a ready market if advertised in the "Business Opportunities" columns of GRAIN & FEED JOURNALS, Chicago. 9,800 grain men look to these columns twice each month for real opportunities.

## Universal Grain Code

Compiled especially for use by the Grain and Milling Trades. Reduce your telegraph tolls. Keep your business to yourself. Prevent expensive errors.

Its 146 pages contain 13,745 code words for expressions used in the grain trade, printed on bond paper and bound in black flexible leather. Size 7x4½ inches. Price, leather, \$3.00; paper, \$1.00, f. o. b. Chicago.

**GRAIN & FEED JOURNALS**  
Consolidated

332 S. La Salle St., Chicago, Ill.

## Modern Methods

**GRAIN & FEED JOURNALS**  
CONSOLIDATED

332 So. La Salle St., Chicago

A Merger of Grain Dealers Journal, American Elevator & Grain Trade, Grain World and Price Current-Grain Reporter.

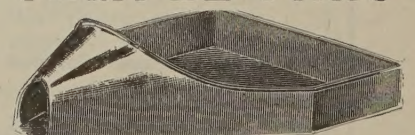
**Gentlemen:**—In order to keep posted on modern methods of elevator management, I wish to receive the *Grain & Feed Journals Consolidated* semi-monthly. Enclosed find Two Dollars.

Name of Firm.....

Capacity of Elevator      Post Office.....

..... bushels      State .....

## SAMPLE PANS



Made of sheet aluminum, formed by bending, reinforced around top edge with copper wire. Strong, light, durable. The dull, non-reflecting surface of the metal will not rust or tarnish; assists users to judge of the color and to detect impurities.

Grain Size, 2½ x 12 x 16½", \$2.00 at Chicago.

Seed Size, 1½ x 9 x 11", \$1.65 at Chicago.

**GRAIN & FEED JOURNALS**  
CONSOLIDATED

332 So. La Salle St., Chicago, Ill.



## Receiving Books For Grain Buyers

**Wagon Loads Received.** A good form used extensively in recording wagon loads of grain received from farmers. Tare weight is entered immediately under gross to facilitate subtraction. Contains 200 pages of linen ledger paper, and is ruled 20 lines to a page, thus accommodating 4,000 wagon loads. Separate pages may be devoted to each kind of grain to each farmer, or wagon loads may be entered in the order received. Well bound in cloth, with keratol back and corners. Order Form 380. Price \$2.50. Weight 2 3/4 lbs.

**Receiving and Stock Book** for keeping a record of each kind of grain received in separate columns, so buyer may easily determine total amount of any kind of grain on hand. Size 9 1/4 x 11 1/2, 200 pages, with a capacity for 4000 wagon loads. Well printed on linen ledger paper, bound in strong board with leather back and corners. Order Form 321. Price \$2.50. Weight 2 3/4 lbs.

**Scale Ticket Copying Book** contains 150 leaves of scale tickets, four to a leaf. Each leaf folds back upon itself, so that with the use of carbon paper, it will make a complete copy of the original on the stub, with one writing. Original tickets forming the outer half of leaf are machine perforated. Printed on bond paper, check bound, size 9 1/2 x 11, supplied with four sheets of carbon. Order Form 73. Price, \$1.30. Weight 2 lbs.

**Grain Scale Book,** a combined Journal and Receiving book with index. Each man's grain is entered on his own page, or a page may be allotted to each kind of grain received. Both debits and credits are posted to the ledger. Contains 252 numbered pages and index, size 10 1/4 x 15 1/2, and will accommodate 10,332 wagon loads. Printed on linen ledger, bound in extra heavy black cloth covers, with leather back and corners. Order Form 23. Price \$4.00. Weight 5 lbs.

**Grain Receiving Register** is designed for recording the receipts of wagon loads of grain. Loads may be entered in consecutive order, or different sections of the book may be devoted to different kinds of grain. Book contains 200 pages of linen ledger paper, size 8 1/2 x 14 inches, each of which is ruled for 41 entries, giving a total capacity of 8,200 wagon loads. Well printed and substantially bound in full canvas. Order Form 12AA. Price \$2.50. Weight 3 Lbs.

**Duplicating Wagon Load Receiving Book,** designed to facilitate the recording of number of loads from one farmer in a short time. Book contains 225 leaves, size 12 x 12 inches with 33 lines each, perforated down the middle; the inside half of the leaf remains in the book, and the outer half with the same ruling printed on the reverse side, folds back over the left half with carbon between. Outer half is given to farmer. It may also be used by line agents in making daily reports to headquarters. Check bound with canvas back, nine sheets of carbon. Order Form 66. Price \$2.60. Weight 4 1/2 lbs.

**Grain Receiving Ledger,** may be used first as a Stock Book by posting the receipts daily, weekly or monthly from some other portion of this book, or from any other scale book, giving a page to the commodity handled; Second, as a patrons' ledger, by giving a full or half page to each patron; Third, pages may be used to enter each load of grain received in consecutive order under their respective commodity headings. The book contains 200 numbered pages with 44 lines each, and marginal index in front, size 8 1/2 x 13 3/4, ruled with the usual column headings, including Debit and Credit columns. Printed on linen ledger paper and well bound in black cloth sides with keratol back and corners. Order Form 43. Price \$3.00. Weight 2 1/2 lbs.

Form 43XX contains 400 pages same as above. Price \$5.00. Weight 4 1/2 lbs.

All Prices are for Chicago Delivery.  
Postage Extra.

Printed and Supplied by

**Grain & Feed Journals  
Consolidated**

332 South La Salle St. Chicago, Ill.

## MACHINES FOR SALE

**CORN CUTTER & Grader**—has motor—used very little. 76D6 Grain & Feed Jnls., Chicago.

**FEED MIXER**—one ton—floor level feed—has motor—good as new. Write 76D8 Grain & Feed Journals, Chicago, Ill.

**ALMOST ANYTHING YOU WANT** can be promptly obtained through JOURNAL want ads.

**HAMMER MILL** with 25-h.p. motor and all attachments. Priced to sell. Write 76D7 Grain & Feed Journals, Chicago, Ill.

Every penny invested in a Journal "Wanted—For Sale" ad returns an amazing per cent of profit.

**FEED MIXER** for sale, has motor, and a late machine. Need space. Will sacrifice. Write 76D5 Grain & Feed Journals, Chicago, Ill.

**FEED MIXER** one ton vertical, floor level feed; has motor; latest type machine; bargain for cash. 75N4, Grain & Feed Journals, Chicago.

**TRUCK DUMP** and scales, sheller and cleaner, Richardson automatic scale, hammer mill and a portable priced to sell. W. W. Pearson, West Point, Ind.

## NEW AND REBUILT MACHINERY

Corn cutter and grader, new; corn cracker and grader, used; Gruendler half ton mixer; No. 9 & 89 clipper cleaners; No. 6 Invincible cleaner; 1 vita cereal mill; 2 & 3 pr. high 9x18 roller mills; hammer mills; belt and motor driven attrition mills. Everything for the feed mill and elevator. Write your wants to A. D. Hughes Co., Wayland, Mich.

**THE WANTED-FOR SALE DEPARTMENT** of GRAIN & FEED JOURNALS is a market place where buyer and seller, employer and employee, and those offering investments can meet to their mutual advantage and profit and it will pay every subscriber to give these columns a close study twice each month, because of the constantly changing variety of opportunities seeking your consideration.

## ENGINE WANTED

**ANY KIND, ANY SIZE, Any Price engine,** which is not in use, and which you wish to sell, will find many ready buyers if advertised in the "Engines For Sale" column of GRAIN & FEED JOURNALS. Try it.

## Warning

Notice is given by the American Cyanamid Co., Warners, N. J., that it does not manufacture a rodenticide labeled "The New Cyanogas Formula 'M'" and that anyone, representing himself to be an employe of such company, and offering for sale, in the name of such company a product so labeled, is doing so fraudulently.

## RAT EXTERMINATOR

**RAT LUNCHES**—Kills rats and mice without poison. Ready to use. Just lay them out. Endorsed by agricultural authorities. \$1 large package—\$3.50 a carton prepaid. Salesmen-Distributors wanted. Rat Lunches Co., Carroll, Ia.

## ENGINES FOR SALE

**ONE WAUKESHA** 4 cylinder 80-h.p. power unit for sale. A-1 condition. Sark & Plum, Inc., Lilly Chapel, Ohio.

## MACHINES WANTED

**MACHINERY FOR A** 100 barrel flour mill wanted. Must be in good condition. Pampa Milling Company, Pampa, Tex.

**SACK PILER WANTED**—State make, age, length and width of carrier, condition, price; a picture if possible. Write 76C9, Grain & Feed Journals, Chicago, Ill.

**WANTED**—Grain Dealers who are contemplating installing new machinery to use the "Machines Wanted" columns of GRAIN & FEED JOURNALS in securing prices and estimate of machines for sale. We can save you money. More than value received.

## MOTORS FOR SALE

**ELECTRIC MOTORS,** Generators, Air Compressors, engines, pumps, all makes, types and sizes. All completely rebuilt, One Year Guaranteed and attractively priced. Write us on your requirements. Rockford Electric Equipment Co., 728 South Wyman St., Rockford, Illinois.

**DYNAMOS AND MOTORS WANTED**—Buyers and this equipment are reached in largest numbers and at the least expense through the use of the "DYNAMO-MOTORS" columns of Grain & Feed Journals—the medium for power bargains.

## Improved Grain Tickets

Owner			
Hauler			
Grain	Grade	Dockage	%
Gross			
Tare			
Net			
Total Dockage			
Net Pounds			
Bushels			
Price	Amount \$		
Storage Ticket No.			
Check No.			
Station			
No.	19		
Weigher			
Name of Firm or Buyer			

(Illustration is one-half size of original ticket.)

Using Form 19GT as a scale book saves much time and labor as one writing with the use of carbon will give you a complete record and a ticket for the hauler.

Each of the 125 original leaves bears four scale tickets, printed on white bond, machine perforated. Each ticket is 3 inches wide by 6 3/4 long. The 125 duplicate leaves are printed on manila, but not perforated. Check bound at top of tickets with hinge top cover, 500 tickets in each book arranged horizontally. Each book is 7 1/2 x 12 inches, supplied with 5 sheets of No. 1 carbon.

**Duplicating.** Weight, 2 1/2 lbs. Order 19GT Dup. Price \$1.20, plus postage.

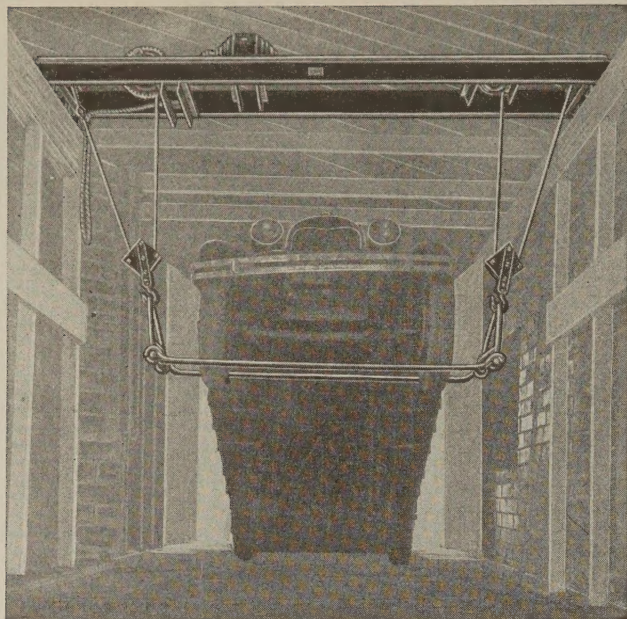
**Triplicating** is the same as 19GT Duplicating. In addition, sheets of strong white tissue are bound in between the original tickets and the duplicates so as to facilitate making three copies with one writing. Five sheets of dual-faced No. 1 carbon, 375 leaves. Weight, 3 lbs. Order 19GT Trip. Price \$1.65, plus postage.

Cash with order for twelve books earns 10% discount.

Send all orders to

**Grain & Feed Journals Consolidated**  
332 So. La Salle St., Chicago, Ill.





## American Electric Truck Lift

For long and short trucks. Wide, heavy construction. No binding. Positive locking gear. Easy installation.

Complete stock of elevator machinery including

Heads	Boots	Pulleys	Head Drives
Spouting	Buckets	Rope	Howe Scales

Write for catalog and prices.

**AMERICAN MACHINERY & SUPPLY CO., Omaha, Nebraska**

## Spontaneous Ignition of Grain Dust

is always a fire hazard in the grain elevator and feed mill.

Reports to us indicate an increased fire hazard in storing damp dust from the grain of the last crop. Dust should not be allowed to accumulate or remain in your plant.

We recommend extreme vigilance. Aerate your dust house and keep your plant clean.

## Mutual Fire Prevention Bureau

Department of  
Association of Mill and Elevator Mutual Insurance Companies.

230 East Ohio Street  
Chicago, Illinois

## WHAT DO YOU NEED

to modernize your plant so it will minimize your labor and increase your profits? Is it here?

Account Books	Hammer Mill
Attrition Mill	Head Drive
Bag Closing Machine	Leg Backstop
Bags and Burlap	Lightning Rods
Bearings { Roller	Loading Spout
Ball	Magnetic Separator
Belting	Manlift
Bin Thermometer	Moisture Tester
Bin Valves	Motor Control
Bleachers and Purifiers	Mustard Seed Separator
Boots	Oat Clipper
Buckets	Oat Huller
Car Liners	Plans of Grain Elevators
Car Loader	Portable Elevator
Car { Puller	Power { Oil Engine
Pusher	Motors
Car Seals	Power Shovel
Cipher Codes	Railroad Claim Books
Claim (R. R.) Collection	Rope Drive
Clover Huller	Safety Steel Sash
Coal Conveyor	Sample Envelopes
Concrete Restoration	Scales { Truck
Corn Cracker	Hopper
Conveying Machinery	Automatic
Distributor	Scale Tickets
Dockage Tester	Scarifying Machine
Dump	Screw Conveyor
Dust Collector	Seed Treating { Machine
Dust Protector	Separator
Elevator Leg	Sheller
Elevator Paint	Siding-Roofing { Asbestos
Feed Formulas	Steel or Zinc
Feed Ingredients	Silent Chain Drive
Feed Mixer { Dry	Speed Reduction Units
Molasses	Spouting
Feed Mill	Storage Tanks
Fire Barrels	Testing Apparatus
Fire Extinguishers	Transmission Machinery
Foundation Restoration	Waterproofing (Cement)
Grain Cleaner	Weevil Exterminator
Grain Drier	Wheat Washer
Grain Tables	

Draw a line through the supplies wanted, and write us regarding your contemplated improvements or changes. We will place you in communication with reputable firms specializing in what you need, to the end that you will receive information regarding the latest and best.

### INFORMATION BUREAU

Grain & Feed Journals, 332 So. La Salle St., Chicago





# GRAIN & FEED JOURNALS

CONSOLIDATED

INCORPORATED

332 S. La Salle St., Chicago, Ill., U.S.A.  
Charles S. Clark, Manager

A merger of  
GRAIN DEALERS JOURNAL  
Established 1898

AMERICAN ELEVATOR &  
GRAIN TRADE  
Established 1882

THE GRAIN WORLD  
Established 1928

PRICE CURRENT—GRAIN REPORTER  
Established 1844

Published on the second and fourth Wednesdays of each month in the interests of better business methods for progressive wholesale dealers in grain, feed and field seeds. It is the champion of improved mechanical equipment for facilitating and expediting the handling, grinding and improvement of grain, feeds and seeds.

SUBSCRIPTION RATES to United States, Canada and countries within the 8th Postal Zone, semi-monthly, one year, cash with order, \$2.00; single copy current issue, 25c.

To Foreign Countries, prepaid, one year, \$3.00.

THE ADVERTISING value of the Grain & Feed Journals Consolidated as a medium for reaching progressive grain, feed and field seed dealers and elevator operators is unquestioned.

Advertisements of meritorious grain elevator and feed grinding machinery and of responsible firms who seek to serve grain, feed and field seed dealers are solicited. We will not knowingly permit our pages to be used by irresponsible firms for advertising a fake or a swindle.

LETTERS on subjects of interest to those engaged in the grain, feed and field seed trades, news items, reports on crops, grain movements, new grain firms, new grain elevators, contemplated improvements, grain receipts, shipments, and cars leaking grain in transit, are always welcome. Let us hear from you.

QUERIES for grain trade information not found in the Journal are invited. The service is free.

CHICAGO, ILL., FEBRUARY 26, 1936

SOIL depletion that the bureaucrats have seized upon as an excuse for regimenting the farmers is confined to limited areas. Statistics prove that the productive capacity of this country per acre of the area in use is greater now than it was in 1870.

OWNERS of truck scales owe it to themselves and the trade at large to charge traveling truckers at least fifty cents for gross and 50 cents for tare weights. Their large investment and their expense of maintenance fully justifies even a larger charge.

DISLOCATION of trading hours by the Chicago City council will make it practically impossible for members of the Chicago Board of Trade to adopt a new schedule satisfactory to all interests doing business in the commodities dealt in on the Board. Unfortunately the members of the Board of Trade who will vote on the question have no power to cause the sun to rise earlier than the grain inspectors may have daylight to see the samples before sending them to the floor of the exchange.

GRAIN DEALERS who handle flour are again exchanging it for wheat with renewed satisfaction to growers.

COUNTY AGENTS have no right to buy or sell anything, in fact merchandising activities are not authorized, and specific complaints supported by authentic evidence to C. W. Warburton, Director of Extension Work, in Washington would earn a quick reprimand.

THE DISCOVERY of oily waste from a nearby box car and the remnants of an oilsoaked jumper burning against the outside wall of an Illinois grain elevator office, as reported in our news columns, indicates that some pyromaniacs are laboring under the false impression that they can indulge their weakness without imperiling their freedom.

GARBLING the buro report against cotton control as not benefiting the farmers will react against the higher-ups who substituted a declaration of their own that regimentation of the cotton planters must continue. The buro report is in line with the findings of the University of Texas criticizing the policy of crop reduction as applied to the South's great staple.

WHO was it that convinced the merchants engaged in any business activity that codes regulating business would stimulate recovery? Experience with business regimentation has not filled the goosestep boys with sufficient regrets to prompt them to demand the revival of the NIRA, at least none of the resolutions adopted at recent trade association conventions expresses any doubt as to the ability of business to recover without first being strangled by the code authorities.

FREEZING CORN and soya beans containing excessive moisture will not increase the germination percentage or improve the vitality of any plants that may result from their sowing. The urgent need for germination tests of all corn and soya beans intended for seed presents an excellent opportunity for every country elevator operator to render a service of unusual value both to his farmer patrons and his own business. If the farmers fail to get a crop the country buyers will be forced to depend upon their sidelines for income.

THOUGHTFUL ECONOMISTS in many lines of business are rapidly coming to a conclusion that the one thing necessary for improving farm conditions is the immediate and energetic promotion of all foreign trade. Advising, exhorting and bribing U. S. farmers to reduce their acreage has served principally to stimulate the production of all kinds of grain in the other exporting countries of the world to the great disadvantage of the U. S. farmers. Seeking prosperity for producers through scarcity has contributed nothing to permanent farm relief.

TRUCKERS OF UNKNOWN origin have unloaded so much spurious, worthless field seeds upon the unsuspecting farmers of Arkansas that the Plant Board of that state has instituted a vigorous campaign against these swindling nomads who seem to have outdone the gold brick artist of fifty years ago. If buyers would always insist upon having a written receipt showing the kind of seed, its origin, its purity and germination, as well as the name and address of the trucker, it might be possible to apprehend the offender and stop his activities in the field seed trade.

IT IS SOMEWHAT difficult to understand why state railway commissions or freight traffic officials should ever seriously consider the cancellation of transit privileges. These rates were established primarily for the encouragement of industries at points favorable to the processing of raw products into manufactured goods and numerous new industries have been established and successfully conducted for many years at transfer points to the great advantage of producers, consumers, manufacturers, and last but not least, the railroads themselves. Any action of a railway commission unfavorable to transit rates must be the result of a misguided or a perverted judgment.

SPRING WHEAT farmers being free from any regulation or limitation by the A.A.A. or other governmental agency will, no doubt, take advantage of their opportunity and greatly increase their acreage this spring. But, of course, many will harvest nothing but barren regrets unless elevator operators hasten to warn them against the folly of planting shrivelled lightweight seed, which cannot be expected to produce a crop. Many different agencies are working overtime in search of desirable seed, and doubtless hundreds of elevator operators who recognize their opportunity to help their farmer patrons to larger yields of desirable grain are getting or making tests in hope of improving the crops grown in their territory.

THE URGENT DEMAND for corn has resulted in a heavier movement from the interior points recently than the railroads had expected, so many shippers have been confronted with a scarcity of cars suitable for transporting anything but ear corn to market. So many of the box cars are old and decrepit cautious shippers will hesitate to entrust their small grain to them for transportation without careful cooping before loading. Grain shipments from many sections have been so small during the last two years carriers have not exercised their usual vigilance to keep their box cars in condition to deliver at destination all grain received at point of loading. So greater vigilance is needed on the part of the shippers else they are sure to suffer heavy losses in transit.



CALIFORNIA'S new sack law must be observed by grain buyers who would avoid trouble with the state authorities. To comply with the law sales contracts must provide for payment for sacks as an item separate from payment for the grain contained.

**PROBLEM:** If the Resettlement Administration managed by our undersecretary of agriculture requires 12,089 officials to find jobs for 5,012 relief clients, how many officials will be required by him when he takes over the administration of the 6,288,000 farms in the country?

GRAIN DEALERS who employ eight or more in some states and four or more in others are devoting much time to systematizing their records of payrolls in hope of minimizing their payroll taxes on this year's business. While it is not certain that all of those who have been unable to obtain employment want work, still the new laws are designed to insure their receiving unemployment pensions and to provide old age pensions at the expense of those who are willing to work.

SINCE THE DEATH of the Blue Eagle and the autocratic direction by the N. R. A., the grain trade seems to be drifting, hopelessly drifting. Of course, the general depression, the drouth of '34 and the poor crop of '35 have all contributed to lend discouragement to the dealers of many sections, but they still keep open house in the hope of doing business some day. If all sections of the trade were working harmoniously for the general promotion of the business, it would be easy to obtain some relief from the drifting policy. Grain trade leaders generally recognize that the common interest of all engaged in the business would be greatly promoted if some enthusiastic leader would come forward with a definite purpose and plans. The trade at large must depend upon the associations and their active officers for leadership, but little progress can be expected until all are pulling together with a firm determination to surround the trade with better business conditions as well as more cordial relations among the organized units as well as the trade at large.

## Restrictive Laws Harmful to Farmers' Market

That 95 per cent of the operations on the wheat market are speculative, as stated to a house sub-com'ite by the chief of the grain futures administration explains how it is that millers and merchandisers of wheat can always find someone to take their hedging trades.

A large volume of trading always has the happy effect of bringing the bid and asked prices closer together, the difference, in the grain futures market sometimes disappearing to the vanishing point.

The Jones bill, by restricting speculation, can be expected to drive more traders out of the market; and, lacking their support, prices will rule lower, to the detriment of the growers, who are the beneficiaries of the system of future trading created not by the government, but by those interested in the maintenance of efficient marketing facilities.

When speculation functions freely in the public markets, the contributions of the speculative class are greatest. As a class, the speculators take nothing out of the market at the expense of grower or processor. A few may profit; but the losses of the speculators exceed their profits, according to statistics compiled by Stanford University. Consequently, as a whole, the speculators not only do not profit, but actually are paying for the privilege of speculating.

Does the chief of the futures administration desire congressmen to infer that if speculation could be cut down by the Jones bill to less than 95 per cent or to nothing at all, the price would more nearly reflect actual conditions of supply and demand? Elimination of the speculative interest, as suggested by him, of course, would prevent big bull speculative markets on crop scares months in advance of harvest, the advance in prices not occurring until harvest, and perhaps not then, under the ideal absence of speculation envisaged by the chief.

If the congressmen would do something constructive instead of destructive, let them repeal the tax on grain futures transactions and abolish the Grain Futures Administration.

## Promoting Goodwill

Several interesting stories have reached us recently regarding the efforts being made by country elevator operators to attract old and new customers and win their goodwill. Through the free distribution of peanuts, candy, some form of entertainment or contests that will stimulate the interest of their patrons and help to establish more cordial relations, crowds have been lured to the elevators by well advertised events.

One venture which is entirely new involved three elevator companies which joined hands in giving an entertainment to farmer patrons in a nearby city hall, consisting of talking pictures and the distribution of a number of attractive prizes.

A Michigan elevator company had a large Christmas tree beautifully decorated near its office and presented Christmas carols, recitations, songs and speeches, followed by a distribution of many attractive presents.

A Nebraska elevator man attracted many to his office with a guessing contest. All of these entertainments should help the elevator operator to make new friends and win new patrons. It is to the farmer's advantage as well as the elevator man's profit to keep his prospective patrons thoroly informed as to the location and scope of his business.

## The New Farm Relief Bill

One shudders to think what might happen if an incompetent were to occupy the office of Secretary of Agriculture.

Under the new farm relief bill, the Secretary can do almost anything. He has \$500,000,000 to spend, to distribute to farmers who bow the neck to his yoke. The laws enacted by the several states, having to do with benefit payments under soil conservation, must be satisfactory to the Secretary.

The authorization to stabilize the markets is full of menace, as threatening a repetition of the Federal Farm Board fiasco.

The Secretary is granted power to turn over public money to corporations buying and selling farm products.

To cinch the delegation of power to the Secretary, it is provided that facts constituting the bases of payments "shall be reviewable only by the Secretary of Agriculture."

If the congressmen think that they are legislating in passing this bill, they are deceiving themselves. What they are doing is just a variation of the popular pastime of the day, known as "passing the buck." They are putting it up to the Secretary to work out plans for farm relief, and giving him not the remotest clue as to just how he is to accomplish the result.

The bill constitutes the Secretary the dictator of American agriculture.

## Each of Us

can bring the dream of peace nearer realization by being in our individual relations more kindly, more tolerant, more sympathetic, and, above all, less critical of each other.

Ida Clarke.



# Stockton Grain Terminal

Stockton, an interior city of California, 88 miles by water from the Pacific Ocean, has immediately tributary to it a territory devoted to grain farming on a large scale. The state produces annually about 25,000,000 bus. of barley, much of which is available for export or coast-wise shipment.

When the San Joaquin River was deepened a few years ago to 32 feet commercial interests were quick to send ocean steamships entering the bay at San Francisco up the river as far as Stockton. Within 20 months after the port had been opened 455 ocean-going vessels had docked and over 650,000 tons of freight had been moved.

During 1935 the grain movement thru the port included 2,616,000 bus. barley, 41,400 bus. wheat, 127,000 bus. oats, 28,300 bus. corn, 1,722 tons of rice, 1,297 tons of gyp corn, and 163 tons of grain not otherwise listed.

No tugs are needed in docking vessels at Stockton. Steamers can load bulk or sacked grain and general commodities without shifting their position.

To facilitate the handling of grain the Stockton Port Commission has constructed a grain terminal at a cost of over \$300,000, comprising a grain cleaning plant, grain elevator with 2,000 tons of bulk storage and warehouses for 25,000 tons of sacked grain. The storage capacity of the plant when finished will be about 1,900,000 bus.

THE CLEANING HOUSE was built to grade, blend or clean feed or brewing barley. The capacity is approximately 40 tons per hour when cleaning or grading and 60 tons per hour when blending.

The headhouse is 36x42 ft., and 103 ft. 5½ ins. high, consisting of full concrete basement, six floors of semi-mill type construction and a cupola, covered with corrugated galvanized iron. The 10 elevator legs in the elevator have D.P. buckets and deliver 100 tons per hour.

On the 6th, or top, floor are a No. 8 and No. 9 style "B" Warehouse and Receiving Master Cleaners. On the 5th floor are two No. 8 Cleaners and a Big 5 largest size Carter Disc Separator. On the 4th floor are two double Needle Screen Separators, two 5-ton hopper scales and the conveyor belt that extends out over the bins. On the 3d floor are three double needle screens and two 5-ton scale bins. On the 2d floor are three sets of needle screens and a No. 13 Scalper. On the first floor is a sump pump, and in the basement is a 30-inch conveyor belt, running from the elevator to the scale house, delivering to the elevator on the upper run and to the scale house on the lower run.

Barley going to the headhouse for cleaning is delivered to a garner above a 5-ton scale; from scale to the No. 13 Scalper or rougher on the second floor, where it is elevated to a bin on the 6th floor. From this bin it discharges to a No. 9 on the 6th floor, which floats over the lighter material to two No. 8 Separators on the 5th floor. There is also a No. 8 Separator on the 6th floor which takes care of any overflow from the bin above the No. 9 Separator on the 6th floor. A 5-ton hopper scale after cleaning weighs for delivery.

For grading there is a battery of 8 double sets of needle screens, size 5½, the screenings from which are spouted to or around a battery of three double sets of No. 5 needle screens. There is also the largest size disc machine, the screenings which are spouted to or around a small disc separator for recleaning the tailings of the Big 5.

THE STORAGE BINS are located within the warehouse space that covers 41,082 square ft. and are of 2x6 cribbing, 14x14 ft., the bins covering 72 ft., 6 ins. by 44 ft., 4½ ins., being 58½ ft. high. The cupola over the bins is 18 ft. wide and 18 ft. high. The belt tunnel below the bins is 14 ft. wide and 12 ft. in height. The 15 bins are filled by a 5-ply belt conveyor running

through the cupola from the railroad terminal elevator head house.

THE HEAD HOUSE for unloading and loading is 14x16 ft., 60 ft. high having two grain legs with 14-in. D.P. Buckets. Cars on two tracks are unloaded by power shovels. Underneath is a 24-in. belt conveyor that delivers to the cleaning house on its top run and receives from the cleaning house on its lower run.

Grain coming in by truck is weighed over a 40-ton, Fairbanks Auto-Truck Scale with a 60 by 10 ft. platform and a full capacity dial, capable of weighing both truck and trailer without uncoupling. The California law requires that both truck and trailer be weighed together, or uncoupled. This is operated as a public weighing scale and the large volume of grain coming in in sacks has run the weighing revenue over \$500 in a single month. Another dial scale weighs outgoing sacked grain at the rate of 1500 to 2100 sacks per hour.

THE SCALE HOUSE on the east end of the storage bins is about 93 ft. high, 24 ft., 6 ins. by 21 ft. Two grain elevator legs with 18-inch D.P. Buckets are built into the structure. The two hopper scales have a capacity of 7½ tons and are used to serve the conveyor belt to wharf or to distribute to bins.

A CONVEYOR GALLERY 349 ft. long extends from the corner of the storage bins within the warehouse, across roadway and railroad, through transit shed to shipside. The bottom of the gallery is 22 ft. above the street and rises until it enters the transit shed.

This gallery houses a 30-inch reversible belt 314 ft. long, which travels 625 feet per minute on bulk grain or 125 feet per minute on sacked grain. It will handle 200 tons of bulk grain or 75 tons of sacked grain to ships, per hour. At the dock the belt is connected with an apron conveyor 54 ft. long which discharges either bulk or sacked grain into the hatch of the ship. The same belt will carry grain to the elevator from the wharf, No. 4, 180x400 ft., leased by the Association, where grain is received from river boats.

Twenty electric motors of 210 h.p. drive the machinery through belt or reduction gears. The motors have ball bearings and are dustproof. All machines are individually driven with the exception of the grain legs where one motor of 40 h.p. drives three 16-in. belts and a 30-h.p. two 16-in. leg belts, all in the west head house, a smaller motor driving two legs in the track head house, a 30-h.p. motor driving two 20-in. leg belts in the east end of the house. Motors of 7½ h.p. drive the disc separators and the conveyor belt over storage bins. A 5-h.p. motor drives the manlift.

A dust collecting system is provided, with its collectors on the west wall above the warehouse roof.

The grain terminal is served by two belt railroad tracks connecting with four transcontinental railroads, the Santa Fe, Southern Pacific, Great Northern and the Western Pacific.

The Stockton Port Commission, of which B. C. Allin is director, operates the Stockton Port District, which has leased the grain terminal to the Port of Stockton Grain Terminal Ass'n, which operates the plant as a public utility by authority of the California State Railroad Commission.

The plant was designed by Geo. R. McLeod, general superintendent of the Grain Terminal, and of the Delta Warehouse Co., and was erected by day labor. Wm. Wheeler superintended the construction of the cleaning house and bins, and Dan Russell supervised the setting up of all the machinery.

See illustration on front cover page.

S. 4071, a bill introduced by Senator Capper, provides for payments to farmers of tariff equivalent benefits on commodities consumed within the United States.

## State Price Control Held Unconstitutional

Judge Clarence L. Kincaid, in the Superior Court at Los Angeles, Cal., Feb. 22, declared unconstitutional the California law which makes it unlawful for retailers to offer merchandise to the public at less than cost to them, plus the cost of doing business.

The court held the law to be a monopoly threat to all business.

## Warehouseman Not Guilty of Conversion

Warehouse receipts for grain issued by the Chas. R. Archerd Implement Co., at Salem, Ore., contained a clause stating that lower grades could be delivered by payment of the difference in price. When the company failed the Albert Bros. Milling Co. and the Jenks-White Seed Co., holders of receipts, brought suit against the American Surety Co., for \$8,632 and \$10,968 on its bond, which claims were allowed by the master in chancery.

Justice Fee of the federal court reversed the ruling, holding that the wording of the receipt vested title to the grain in the warehouse company, and that the sale of grain in his custody was not a conversion of the property, but created a debt.

## Conversion by Warehouseman

The Trinidad Bean & Elevator Co. received beans into its warehouses in California and gave a receipt stating that holder of the receipt at his election could accept delivery of beans of equal grade and variety in a public warehouse at a California shipping point. Loans were made on the beans so stored.

Before the loans expired a receipt-holder, P. J. Deaux, demanded the beans he had delivered. He wanted the identical beans. The defendant elevator company had at all times in its possession beans of the same variety, grade and quantity, for delivery.

No charge for storage or insurance was to be made unless the beans were sold to other than the Trinidad Co. Without knowledge or consent of the growers the beans had been shipped out. Plaintiffs demanded the value of the beans and were given judgment, the court holding the receipt entitled the growers to the identical beans and failure to deliver them constituted conversion. Rehearing was denied Aug. 26, 1935, by the Supreme Court of California. 47 Pac. Rep. 535.

## Future Trades of Co-operative Company Lawful

The Pretty Prairie Co-operative Grain Co. made 33 trades in wheat futures on the Kansas City Board of Trade by authority of its board of directors. On 17 of the transactions profits were made, and losses on 16, the net losses amounting to \$11,814.77.

The company, never strong, became insolvent, and the receiver brought suit against the directors alleging the transactions were *ultra vires* and therefore unlawful.

The Supreme Court of Kansas on Oct. 5, 1935, decided in favor of defendant directors, saying:

"The record clearly discloses that all the transactions complained of by the plaintiff were interstate transactions. The Kansas City Board of Trade has been designated a contract market by the Sec'y of Agriculture. All the transactions were recorded and the records preserved in harmony with the federal act; hence these transactions were not unlawful. It is not contended that the grain company was without authority to buy or sell wheat outside of the state of Kansas. Being lawful transactions, within the corporate powers of the grain company, they were not *ultra vires*."—49 Pac. Rep. 973.



## Asked—Answered

[Readers who fail to find trade information desired should send query for free publication here. The experience of your brother dealers is worth consulting. Replies to queries are solicited.]

### Feed Mixing Chart?

**Grain & Feed Journals:** We are entering farther into the home made feed business and that of mixing and balancing the farmer's grains as we grind them for him; and we are looking for a chart to hang on the wall to show the farmer what he needs when he brings corn and oats to our mill to have ground, such as oil meal, soybean, cottonseed, tankage and meat scraps.—L. N. Bowman, Winnebago, Ill.

**Ans.:** A new chart for the wall of the feed mill indicating plainly to the farmer what proportion of concentrates to add to his home-grown corn, oats and roughages has been issued by the Linseed Meal Educational Com'te. For those desiring it the Com'te supplies also a feeding manual of instructions.

### Fall Needed to Trim Load

**Grain & Feed Journals:** Will you kindly advise me how much of a fall is necessary for grain spouted into a box car from elevator cupola to be diverted to the opposite ends of car thru the use of a bifurcated loading spout?

Our head spout is about 63 ft. above the middle of the doorway of the average box car. If the installation of a bifurcated spout would relieve us of most of the trimming in grain in cars, it might pay us to install such a spout and thus reduce the amount of labor required to ship grain. Thanking you for any light you can give us in this matter, we are, Stone & Son.

**Ans.:** The fall of 63 ft. ought to load 80,000 to 100,000 pounds of grain into a car without trimming, according to B. I. Weller of the Weller Metal Products Co., who has had long experience in grain spouting. A small slope is better than a perpendicular drop, into the bifurcated loading spout.

Over a long period of years the Webster Mfg. Co. has found that "the angle and size of the downspout naturally have considerable influence on the proper loading of car by the Sandmeyer. We never use anything smaller than a 12-in. diameter downspout and the drop of the downspout should not be less than about 60 feet. Where a rectangular downspout is used the area of it should be at least two-thirds of the area of the intake of the Sandmeyer, which is 16x16 ins."

### Acidity Test for Germination?

**Grain & Feed Journals:** We note with interest the article "Germination of Corn Related to Acidity" on the inside back cover of February 12th issue.

In handling seed corn, we are often inconvenienced by the 4 to 5 days' delay required for running germination tests; and are wondering where we may be able to find out, whether there is any practical method of testing acidity that would in a comparatively few minutes' time give us a reasonably accurate idea as to the germination to be anticipated from any given lot.—Chauncey P. Coy & Son, Waterloo, Neb.

**Ans.:** Assuming that the germ was matured the acidity is a fair index to the percentage of germination.

The fact that the germ may not have fully matured in otherwise sound appearing corn robs the acidity test of its value as a dependable estimate of germinating power.

This season weather conditions toward the close of the growing period were unfavorable to maturity of corn, much of which appears sound, by acidity test, but will not germinate over 85%. According to the Runyon Testing Laboratories there is as yet no substitute for the usual germination test, requiring not less than 72 hours.

Detailed information on how the test for acidity is made was published on page 458 of the Dec. 11, 1935, issue of Grain & Feed Journals.

The New Canadian Wheat Board has taken over the surplus of the Canadian Co-operative Wheat Producers.

### Davenport to Have Grain Exchange

The Davenport Grain Exchange has been incorporated at Davenport, Ia., with 5,000 shares of capital stock valued at \$1 each. Jas. A. Van Nice is pres., Jos. Loufek, vice pres., and L. D. Larkin, sec'y-treas.

The principal stockholders are Victoria Elevator Co., Davenport Elevator Co., Ralston Purina Co., Western Flour Mills and Fleischmann Malting Co.

The new exchange will have quarters in a building to be erected on land of the Victoria Elevator Co.

Grading and weighing of grain bought or sold at Davenport will be taken under the jurisdiction of the Exchange.

### The Toll of Poor Equipment

Clutches and power transmission equipment in the elevator of the Martinton Grain Co., Martinton, Ill., were inadequate. Manager Andrew Buchan knew it, but dozens of times he had successfully overcome the deficiency.

On Feb. 8, a couple of trucks came to the elevator. Manager Buchan weighed the trucks, started the elevator's engine, and went up to the cupola to put a leg drive chain on a line shaft.

He was gone quite a time. The truck drivers waited in the driveway. After fifteen minutes passed they grew impatient and climbed the leg well to the cupola.

There they found what remained of Manager Buchan. In trying to put a drive chain on a turning shaft, some part of his clothing had caught. Manager Buchan was whipped about the shaft. An arm was jerked off, a leg was ripped loose, the head was battered and crushed.

Manager Buchan's remains were picked up in a basket and delivered to the morgue, a tragic object lesson in the importance of adequate equipment and proper safeguards.

### Another Swindler Calling on Grain Dealers

Reports from the England states and New York to the effect that a fleet-footed impostor representing himself as a salesman connected with the American Cyanamid Company, has been offering to the milling, grain and feed industries a spurious product bearing the label "CYANOGAS M" for the control of rats and other rodents. This individual uses an automobile, and carries a small supply of the spurious "CYANOGAS M" along with him and sells same for cash. He has made a number of sales, and many companies have purchased "CYANOGAS M" under the impression and upon the misrepresentation that it was one of the American Cyanamid Company's products. Owing to the fact that the individual in question changes his name frequently and moves rapidly from one place to another the Cyanamid Co. has been unable to apprehend him. The makers of Cyanogas are unable to secure any assistance from the Federal Government owing to the fact that the Insecticide Act does not cover materials sold for rodent control. The American Cyanamid Co. manufactures CYANOGAS A and CYANOGAS G, but does not manufacture "CYANOGAS M," which, according to careful analysis, contains no Calcium Cyanide whatever.

### Crop Control Bill Passed by Senate

The Senate on Feb. 15 passed Bankhead's draft of the crop control bill, S. 3780, and it has gone to conference with the companion bill that passed the House, to have differences ironed out.

The bill amends sec. 7 of the soil erosion act by adding the following:

"Sec. 7. (a) It is hereby declared to be the policy of this Act also to secure, and the purposes of this Act shall also include, (1) preservation and improvement of soil fertility; (2) promotion of the economic use and conservation of land; (3) diminution of exploitation and wasteful and unscientific use of national soil resources; (4) the protection of rivers and harbors against the results of soil erosion in aid of maintaining the navigability of waters and water courses and in aid of flood control and (5) reestablishment and maintenance of farmers' purchasing power. In carrying out the purposes of this section due regard shall be given to the maintenance of a continuous and stable supply of agricultural commodities adequate to meet consumer demand at prices fair to both producers and consumers.

"(b) The Secretary of Agriculture shall co-operate with States, in the execution of State plans to effectuate the purposes of this section, by making grants under this section to enable them to carry out such plans.

"(c) Any State which submits to the Secretary, prior to such time and in such manner and form as the Secretary prescribes, a State plan to effectuate the purposes of this section shall be entitled to payments, as provided in this section, for the year to which such plan is applicable, if such plan is approved by the Secretary as provided in this section.

"(d) No such plan shall be approved unless by its terms:

"(1) It provides that the agency to administer the plan shall be such agency as is authorized by the State and approved by the Secretary;

"(2) It provides for such methods of administration, and such participation in the administration of the plan by county and community committees or associations of agricultural producers organized for such purpose, as the Secretary finds necessary for the effective administration of the plan; and

"(3) It provides for the submission to the Secretary of such reports as he finds necessary to ascertain whether the plan is being carried out according to its terms, and for compliance with such requirements as the Secretary may prescribe to assure the correctness of and make possible the verification of such reports.

"(e) Such plan shall be approved if the Secretary finds that there is a reasonable prospect that—

"(1) Substantial accomplishment in effectuating the purposes of this section will be brought about through the operation of such plan and the plans submitted by other States, and

"(2) The operation of such plan will result in as substantial a furtherance of such accomplishment as may reasonably be achieved through the action of such State.

"(f) Upon approval of any State plan for any year the Secretary shall allocate to such State such sum (not in excess of the maximum amount fixed in pursuance of subsection (g) for such State for such year) as he finds necessary to carry out such plan for such year, and thereupon shall certify to the Secretary of the Treasury for payment to such agency of the State as the Secretary of Agriculture certifies is designated in the plan, and the Secretary of the Treasury shall pay to such agency, one-fourth of the amount so allocated. The remainder of the amount so allocated shall be similarly certified and paid in such installments (payable prior to the end of the calendar year) as may be provided in the plan.

"Sec. 11. Whenever the Secretary finds that the exercise of the powers conferred in this section will tend to carry out the purpose specified in clause (4) of section 7 (a), he shall use such part as he deems necessary of the sums appropriated to carry out this Act for the expansion of domestic and foreign markets or for seeking new or additional markets for agricultural commodities or the products thereof or for the removal or disposition of surpluses of such commodities or the products thereof, or for the STABILIZATION OF THE MARKETS for such commodities or the products thereof. In carrying out the provisions of this section the Secretary is authorized and empowered to ENTER INTO CONTRACTS WITH ASSOCIATIONS of producers or associations composed of producer associations as defined by the Act of Congress of February 18, 1922, as amended, known as the Capper-Volstead Act, under which said associations may be designated by the Secretary as the agency to carry out any program authorized by this section, and the Secretary is further authorized and empowered to ALLOT TO SAID ASSOCIATIONS WHATEVER FUNDS may be necessary to carry out any program authorized by this section.



"Sec. 14. To enable the Secretary of Agriculture to carry out the purposes of sections 7 and 8 there is hereby authorized to be appropriated for any fiscal year not exceeding \$500,000,000.

"Sec. 15. The obligations incurred for the purpose of carrying out this Act by the Secretary of Agriculture for any fiscal year shall not exceed such sum of \$500,000,000.

"(b) This Act may be cited as the Soil Conservation Act."

## No Change in Corn Screen

The U. S. Dept. of Agriculture on Feb. 11 issued the following announcement:

"The Department announces that it does not deem it advisable at this time to promulgate a revision of the official corn standards that would specify the use of a 10/64-inch round-hole sieve instead of the present official 12/64-inch sieve in the determination of 'cracked corn and foreign material.'"

## National Scale Men Meet in March

The 20th annual convention of the National Scale Men's Ass'n will be held at the Sherman Hotel, Chicago, Mar. 9-11, inclusive.

An attractive program has been arranged. Interesting features for grain dealers include "Considerations in the Design of Torsion Scale Lever" by Engineer Thomas J. Rhodes of the Howe Scale Co., and "Automatic Weighing of Materials" by N. C. Webster, Richardson Scale Co., both of Chicago, and both scheduled for the Tuesday (Mar. 10) morning session. D. J. Strauch, manager, Fairbanks Morse & Co., East Moline, will explain "Manufacturing Motor Truck Scales" on Wednesday morning.

The average net bushels per car unloaded in Canada during January, 1935, was 1,539 of wheat, 1,891 of oats, 1,448 of barley, 1,334 of rye and 1,119 of flaxseed.

## Coming Conventions

Trade conventions are always worth while, as they afford live, progressive grain dealers a chance to meet other merchants from the same industry. You can not afford to pass up these opportunities to cultivate friendly relations and profit by the experience and study of others.

Feb. 26, 27. Indiana Farmers Grain Dealers Ass'n, Logansport, Ind.

Mar. 9, 10, 11. National Scalemen's Ass'n, Sherman Hotel, Chicago, Ill.

Apr. 22, 23. Western Grain & Feed Dealers Ass'n, Sioux City, Ia.

Apr. 23, 24, 25. California Hay, Grain & Feed Dealers Ass'n at the Biltmore Hotel, Los Angeles, Cal.

May 24. National Farmers Co-op. Elvtr. Assn', Hotel Fontenelle, Omaha, Neb.

May 26, 27. Kansas Grain Dealers Ass'n, Dodge City, Kan.

June 1, 2. Pacific States Seedsmen's Ass'n, Hotel Del Monte, Del Monte, Cal.

June 1, 5. American Ass'n of Cereal Chemists, Adolphus Hotel, Dallas, Tex.

June 8, 9. Central Retail Feed Ass'n, Schroeder Hotel, Milwaukee, Wis.

June 11, 12. American Feed Manufacturers Ass'n, Greenbrier Hotel, White Sulphur Springs, W. Va.

June 16-17. Northwest Retail Feed Ass'n, West Hotel, Minneapolis.

June 22, 23. Ohio Grain, Mill & Feed Dealers Ass'n, Cedar Point, O.

June 25, 26, 27. Southern Seedsmen's Ass'n at Dallas, Tex.

June 29. Farm Seed Group of A. S. T. A. at Dallas, Tex.

June 29, 30 and July 1. American Seed Trade Ass'n at Dallas, Tex.

Oct. 12, 13. Grain and Feed Dealers National Ass'n at Hotel Schroeder, Milwaukee, Wis.

# Letters from the Trade

[The grain dealers' forum for the discussion of grain trade problems, practices and needed reforms or improvements. When you have anything to say of interest to members of the grain trade, send it to the Journals for publication.]

## How Is Tax on Future Contracts Justified?

*Grain & Feed Journals:* We would like very much to know how our law makers justify or excuse the levying of a tax on sales of farm products for future delivery. If our bureaucrats are convinced the farmer is realizing too large a profit from the sale of his products, why not levy a tax on sales for immediate delivery, as well as for future delivery? If anyone has ever attempted to justify the tax on sales for future delivery, we would appreciate very much knowing of the argument presented in support of the contention. As we view the effect of the Federal tax on sales for future delivery we are convinced it is detrimental to the producers.

If there is any justification for taxing sales of farm products for future delivery, then why not tax the future contracts of our professional politicians, who run up and down the country voluntarily making all kinds of promises to the voters and accepting the contract when elected, yet forgetting all of their promises and ignoring their contract when they get into office. It would seem to us that if anyone is to be taxed for contracting for the future delivery of either service or commodity, then those who fail to live up to their contract are the ones who should be taxed and most heavily. Taxing buyers of grain for future delivery shrinks the sellers' market to the great disadvantage of the producers.

Any light you can give us on this point will be greatly appreciated.—Jones & Schmidt.

## Doors for Driveways

*Grain & Feed Journals:* While driveway doors, along with other parts of country grain elevators have shown improvement during the last few years, the improvement has been nothing better than the rolling hangers in common use on barn doors.

One or two exceptions are evident. In Indiana's hay country the scale cover drive at one elevator has its doors carried on a track on the inside of the drive, so that, when open, the doors lie flat against, and hook to the driveway wall.

At one end of the elevator driveway of the Farmers' Elevator & Supply Co., at Alta, Ia., is an electric, overhead door, the one such door known to be employed by a grain elevator. Manager Edgar Schulke, attending a trucker buying grain, or a farmer dumping a load, touches a button at the doorway to the attached office. An electric motor does the work of opening or closing the door without further attention.

It seems odd that more electrically operated overhead doors have not been employed in elevator driveway construction. Elevator driveways are always drafty. When a breeze is stirring nowhere else the air will blow lustily thru an elevator driveway. This condition makes the driveway very uncomfortable in the winter time, or when the raw winds of fall and early spring blow gale-like across the prairies.

Continuous wind led a Panhandle elevator operator to extend his elevator drive to considerable length, so it would completely inclose a team and wagon-load. He worked out an ingenious arrangement of ropes and pulleys, whereby he could open and close the doors from the dump sink. But it took a good deal of strength to close the heavy, sliding doors by

means of these ropes. Undoubtedly the doors would have been opened and closed much more frequently, to the pleasure of the customers, had they been electrically operated.

If elevator operators have given consideration to overhead driveway doors, we should like to learn their convictions.—A. M. Colman.

Under the AAA policy of scarcity to create the more abundant life, Germany imported in 1935, 181,659,040 pounds of cotton from Brazil and 165,345,000 pounds from the United States. In the preceding year Germany imported only 18,298,000 pounds from Brazil and 418,874,000 pounds from the United States.

## Death of John R. Marfield

John R. Marfield, founder and pres. of the Marfield Grain Co., Minneapolis, died Feb. 13, at the age of 69.

Until his retirement two years ago he had been prominent in the affairs of the grain trade of this country, particularly in the Northwest.

He was pres. of the Minneapolis Chamber of Commerce in 1911-12. Before that he had worked vigorously in the interests of the Grain Dealers National Ass'n and the Council of Grain Exchanges. For some years he was a director of the Grain Dealers National Ass'n. He was born in Ohio. Surviving are his widow, two daughters and a son.



John R. Marfield, Deceased



## Grain Movement

Reports on the movement of grain from farm to country elevator and movement from interior points are always welcome.

Menno, S. D., Feb. 21.—Business slow here; roads blocked. Prospects are good.—Menno Milling & Grain Co.

Boston, Mass.—Another lot of malt was brot to Boston on the steamer Georgia, from Gothenburg, consisting of 800 bags.—L.V.S.

Boston, Mass.—A shipment of 400 sacks of cottonseed meal weighing 40,000 lbs. was exported on the steamer Yarmouth, for St. John, N. B.—L.V.S.

Superior, Wis.—Canadian durum wheat in bond, 25,396 bus. held in Great Northern Elevtr. "S," was shipped out, cleaning up all such holdings here. Duluth-Superior elevators have about 700,000 bus. of this Canadian spring wheat still in store.—F.G.C.

San Francisco, Cal.—January receipts of grain were: Wheat 3,780 tons, barley 26,566, oats 200, corn 160, beans 24,500 sacks, compared with wheat 2,950 tons, barley 17,326, oats 480, corn 160, beans 21,000 sacks, in January, 1935.—James J. Sullivan, chief inspector, San Francisco Grain Trade Ass'n.

Boston, Mass.—Three cargoes of Canadian grain left Boston for overseas within a week. The steamer Exporter sailed with 120,000 bus. for Morocco; America, 107,408 bus., for Antwerp and Rotterdam; Tsinopinas 255,000 bus. for a Greek port, as yet unnamed. Three other vessels are crossing the Atlantic to load grain at Boston.—L.V.S.

New York, N. Y.—January receipts of grain were: Wheat 1,416,100 bus., corn 24,000, oats 15,400, rye 1,700, barley 1,700, compared with wheat 487,990 bus., oats 74,400, rye 3,400, flaxseed 270,000 in January, 1935. Shipments during the same period were: Wheat 3,242,000 bus., oats 54,000, compared with wheat 1,153,000 bus. in January, 1935.—Produce Exchange, dept. of information and stats.

St. Louis, Mo.—January receipts of grain were: Wheat 1,008,400 bus., corn 1,508,000, oats 76,000, rye 52,500, barley 193,600, kafir 9,800, against wheat 562,500 bus., corn 644,000, oats 444,000, rye 25,500, barley 131,200, kafir 24,000, in January, 1935. Shipments during the same period were: Wheat 935,250 bus., corn 629,300, oats 460,000, rye 63,000, barley 80,100, kafir 4,200, against wheat 753,200 bus., corn 169,700, oats 304,400, rye 12,000, barley 12,800, in January, 1935.—C. B. Rader, sec'y Merchants Exchange.

Cincinnati, O.—January receipts of grain were: Wheat 371,200 bus., shelled corn 202,500, oats 104,000, rye 21,000, barley 3,200, compared with wheat 131,200 bus., shelled corn 91,500, oats 30,000, rye 1,400, barley 1,600, in January, 1935. Shipments during the same period were: Wheat 331,200 bus., shelled corn 292,500, oats 24,000, rye 7,000, barley 3,200, compared with wheat 228,500 bus., shelled corn 114,000, oats 32,000, rye 2,800, in January, 1935.—Cincinnati Board of Trade, John O'Hara, in charge of inspection and weighing.

Duluth, Minn.—Figures compiled by the United States Engineers office show the commerce of the Duluth-Superior Harbor for 1935 improved over 1934. Shipments of coarse grains and flour showed increase, but wheat the exception, a considerable loss. Only 15,718,073 bus. of wheat was sent out, hardly anything compared with the totals of former years. Crop shortage due to rust damage was primarily responsible for the small in and out movement of grain during the year. Light eastern demand also contributed in narrowing the flow thru this market. Barley shipments were 7,573,037 bus., corn 1,083,862, rye 2,925,750, oats 8,435,621 and flaxseed 2,593,774 bus.—F.G.C.

Ottawa, Ont., Feb. 21.—Canadian wheat visible supply was reported as 235,414,105 bus. for the week ending Feb. 14, compared with the revised figure of 239,411,485 bus. for the previous week and 244,529,755 bus. for the week ending Feb. 15, 1935. Canadian wheat in the United States amounted to 26,673,403 bus. Wheat marketings in the Prairie Provinces for the week

ending Feb. 7, 1936, amounted to 571,929 bus., the previous week 718,218 bus. were marketed. During the corresponding week a year ago, the receipts were 1,745,096 bus. During the week ending Feb. 14, 1936, the overseas export clearances of wheat amounted to 3,485,275 bus., while imports into the United States for consumption and milling in bond were 837,000 bus. The total is 4,322,275 bus. compared with 5,192,635 bus. for the previous week.—R. H. Coats, Dominion statistician.

Duluth, Minn.—Owing to the limited trading interest the wheat market drags around without making any definite headway in either direction. The trade waits on developments for a lead to follow and stretches the hope for increased market activity in the near future. The long spell of severe cold weather and snow-blocked roads in many sections of the Northwest hampered farmers in marketing and delivery at country elevators and interrupted rail movement to terminals to a considerable extent as well. The result has been a light trickling grain movement, with market feeling the effect of restricted trading supplies. Lightness of coarse grain supplies has held market comparatively steady, with cold weather helping to stimulate a feeding demand over a large area, which fact held stuff back from market and getting to terminal points. Ordinarily there is a fair to active rail shipping movement on at this time to outside points.—F. G. C.

## Crop Reports

Reports on the acreage, condition and yield of grain and field seeds, as well as on the movement to country markets, are always welcome.

McClusky, Ill., Feb. 24.—Crops in this section are fair, after a very cold past month. Acreage is about normal.—F. W. Breitweiser, mgr. McClusky Elevator.

Minneapolis, Minn., Feb. 21.—The spring wheat area in the United States and Canada is well covered with snow and indications point to sufficient moisture to start the seed this spring. Much of this territory went into the winter in a very dry condition and will require considerable moisture to supply the deficiency. Rye is in a condition similar to winter wheat and very little is known of the condition at this time, as it is practically all under a good snow blanket and should be fairly well protected against this severe cold weather.—T. R. Shaw, editor Cargill Crop Bulletin.

Refunded processing taxes are to be recaptured by the government thru an income tax providing for payment of as much as 95 per cent, it is said.

## The Wheat Situation in the Southwest

Frank A. Theis, of Kansas City, Mo., in an able address before the Ass'n of Commission Merchants at Chicago, recently called attention to the predominance of the Southwestern wheat area and the sensational development of agriculture in the trans-Missouri country.

Mr. Theis demolished the erroneous conception that has grown up in this country that we should reduce our yearly carry-over to small proportions.

Taking an optimistic view Mr. Theis analyzed current conditions as follows:

Prevailing conditions indicate that we are rapidly emerging from unnatural unsettlement into a brighter period with an outlook that is truly optimistic. To start, the Southwest will enter the new crop year with the smallest carry-over of grain in many years, with wheat supplies on farms and in country mills and elevators dangerously low for even domestic requirements.

Winter wheat acreage, as officially estimated as of December 1, is 47,529,000 acres, suggesting a crop of 530 million bus. Of this total acreage 30,520,000 are planted in the six Southwest states. If the average yields for these states in the 10-year period 1923-32, as reported by the department of agriculture are equaled, the sown acreage of our states alone would produce around 400 million bus. of the total indicated for the United States.

To Go on Export Basis—With a normal spring wheat crop, there is a possibility that this country will have between 100 to 150 million bushels for export. The world situation, so far as supplies are concerned, is the most encouraging in many years, which, no doubt, will accelerate the prospects of this country regaining foreign trade.

With such prospects, the tremendous available storage in the Southwest will again find profitable use. It must be realized that nearly 6,000 country elevators alone are located in this area. Also consider the fact that Gulf ports have a total capacity of 21 million bus. which has been unused for several years. Including terminal elevators, total storage space in the six states is more than one-half billion bus.

Export Trade Essential — Resumption of wheat and flour export trade is highly essential for the continued progress of the Southwest as a surplus producer. As an example of general participation in such trade and benefits derived, let us consider the crop year of 1924-25. We then exported 70 million bushels of wheat through the Gulf at an average price of \$1.25 a bushel f.o.b. steamer, meaning a reve-

## Daily Closing Prices

The daily closing prices for wheat, corn, oats, rye and barley for May delivery at the following markets for the past two weeks have been as follows:

	Option		Feb.		Feb.		Feb.		Feb.		Feb.		Feb.		Feb.		Feb.	
	High	Low	13	14	15	17	18	19	20	21	24	25	26	27	28	29	30	31
Chicago .....	107	88½	98	98½	98½	97½	97½	98½	98½	98½	99½	99½	99½	99½	99½	99½	99½	99½
Winnipeg .....	102½	82½	84	84½	84½	83½	83	83½	83½	83½	84½	84½	84½	84½	84½	84½	84½	84½
Liverpool* .....	96½	80½	90½	90½	90½	89½	88½	89½	89½	90½	91½	91½	91½	91½	91½	91½	91½	91½
Kansas City .....	108½	88½	95½	95½	95½	95	94½	95½	95½	96½	97½	97½	97½	97½	97½	97½	97½	97½
Minneapolis .....	125½	99½	108	108½	108½	107½	107½	108½	108½	108½	108½	108½	108½	108½	108½	108½	108½	108½
Duluth, durum .....	105½	88½	102	102½	102	101½	100½	101½	101½	102½	101½	101½	101½	101½	101½	101½	101½	101½
Milwaukee .....	106½	89½	98½	98½	98½	97½	97½	98½	98½	99½	99½	99½	99½	99½	99½	99½	99½	99½
Chicago .....	67½	56	61	61½	61½	61½	61½	61½	61½	60½	60½	60½	60½	60½	60½	60½	60½	60½
Kansas City .....	62½	56½	61	62	61½	61½	61½	61½	61½	61½	60½	60½	60½	60½	60½	60½	60½	60½
Milwaukee .....	66½	56½	61	61½	61½	61½	61½	61½	61½	61	60½	60½	60½	60½	60½	60½	60½	60½
Chicago .....	37½	26½	28½	29½	29½	29½	29½	29½	29½	29½	28½	28½	28½	28½	28½	28½	28½	28½
Winnipeg .....	35½	29½	32½	32½	32½	32½	32½	32½	32½	32½	32½	32½	32½	32½	32½	32½	32½	32½
Minneapolis .....	29½	24½	27	27½	27½	27½	27½	27½	27½	27½	26½	26½	26½	26½	26½	26½	26½	26½
Milwaukee .....	37½	26½	28½	29½	29½	29½	29½	29½	29½	29	28½	28½	28½	28½	28½	28½	28½	28½
Chicago .....	59	45	58½	58½	58½	57½	57½	57½	57½	57½	56½	56½	56½	56½	56½	56½	56½	56½
Minneapolis .....	59	42½	53½	53½	53½	52½	52½	52½	52½	52½	51½	51½	51½	51½	51½	51½	51½	51½
Winnipeg .....	53	41½	45½	45½	45½	45½	45½	45½	45½	45	44½	44½	44½	44½	44½	44½	44½	44½
Duluth .....	58½	46½	54	53½	53½	53	53	53	53	53	52½	52½	52½	52½	52½	52½	52½	52½
Chicago .....	40½	35½	37½	38½	38½	38½	38½	38½	38½	38½	37½	37½	37½	37½	37½	37½	37½	37½
Winnipeg .....	42½	34½	37½	38½	38½	38½	38½	38½	38½	38½	38½	38½	38½	38½	38½	38½	38½	38½

\*At daily current rate of exchange.



nue of approximately \$70,000,000 to the farmers of the Southwest who sold this wheat for export. The railroads carrying this wheat to tidewater, earned approximately \$14,000,000; country elevators, about \$1,750,000; export elevators, \$875,000; the exporter about \$500,000; forwarding brokers, chartering agents, fees, inspection, weighing, etc., about \$350,000, and this does not include the additional revenue earned by the steamship people after the grain was placed on their boats. This is building wealth for our farmers and industry generally.

Regardless of the economic unsettlement, in the world which has contributed in such large measure to unbalanced trade between nations, I am convinced that the biggest factor is our unsound protective tariff system. The maladjustment between industry and agriculture is without doubt firmly imbedded in the tariff protection afforded the Eastern industrialist at the expense of the Western agricultural producer.

I am not one of those persons willing to accept a defeatist attitude and proceed on the theory that the United States is definitely out of the export market on wheat and flour. I fully realize that with the conditions now existing in international markets, such as the various trade barriers in importing nations, and plans of control and subsidy in the surplus producing countries, it is going to be a slow, gradual development to restore our trade in world wheat markets. However, once constructive steps are taken to reduce these trade barriers, a very large potential market for the absorption of the United States surplus wheat supplies will definitely present itself.

**Large Crop to Restore Farmer's Purchasing Power**—Assuming that present wheat crop prospects of the Southwest will materialize with a possible production of 400 million bushels, and using the present Kansas City July price as an index of what the farmer may receive for his wheat, this means a possible farm value of some \$250,000,000. It is interesting to note in this connection that the attempt to restore purchasing power to the wheat producer in the last three years shows the following figures in the six Southwestern states we are discussing:

	Farm Value	Adjusted Payments	Total
1933.....	\$105,781,000	\$46,280,000	\$152,061,000
1934.....	153,396,000	47,337,000	200,643,000
1935.....	149,263,000	53,979,000	203,242,000

In conclusion, permit me to reiterate my optimism. What is transpiring in the rebuilding of our agricultural plant to its normal producing capacity is what we all have eagerly wished for the past several years. I am hopefully looking forward to a new era in agriculture and this can be envisioned in the present promising outlook for this means not only rehabilitation for the farmer but added compensation to all lines of business including the grain industry, banking, labor, railroads and merchants generally.

**Mutual Insurance** is defended against hostile interests by the Farmers Union, which at its national convention at Kankakee, Ill., adopted a resolution: That we place ourselves on record as opposing any legislation or any ruling by anyone in official authority that would in any way hamper or destroy the usefulness of cooperative insurance as used at this time by the farmers and citizens of America.

**Washington, D. C.**—Preliminary reports of the Department of Commerce indicate domestic production during the quarter ended Dec. 31, of 29,531,242 lbs. of crude corn oil, 34,717,181 lbs. of refined corn oil, 43,712,220 lbs. crude soybean oil, and 25,494,057 lbs. refined soybean oil. Consumption for the same period, respectively, was 38,891,919 lbs.; 10,296,922 lbs.; 28,592,187 lbs.; and 19,108,630 lbs. The volume of corn germs used in the manufacturing processes totaled 55,438 tons during the period.

## Simplify Tax Collections Plead Ohio Dealers

Members and friends of the Farmers Grain Dealers Ass'n of Ohio assembled in Toledo, for the 18th time, Feb. 19-20, for their 21st annual convention.

Pres. W. M. Jackson, Holgate, presided at all sessions.

S. L. RICE, pres. of the Toledo Board of Trade, made the delegates feel at home with a warm welcome at the opening session that assured them of every co-operation from local grain firms in making the convention a success.

Pres. Jackson, and Sec'y C. S. Latchaw, Fostoria, made their annual reports at the Wednesday morning Session.

C. E. HUFF, pres. of the Farmers National Grain Corp., Chicago, was the principal speaker at the second session, held Wednesday afternoon. He sharply criticized the national policies of the present administration which fosters imports of foreign agricultural products, while the products of domestic farms rot in warehouses, or are forced to meet the price competition of the imports. The purchase of foreign grain by a domestic buyer eliminates the demand of that buyer for domestic commodities, he declared. Yet he defended the theory of curtailed production which has been the policy of the Department of Agriculture under the A.A.A. until the latter was declared unconstitutional. He pleaded for endorsement of the Jones commodity exchange bill, but neglected to explain that the bill promises to place grain production and control in the hands of certain types of dealers who meet the requirements of the Capper-Volstead act.

L. J. FOSTER, Louisville, Ky., sec'y, Bank for Co-operatives, said that internal dissension is a great handicap when a co-operative must meet the competition of private enterprises. He urged that younger elements, college-trained, be brought into the organization, and warned against branching too widely into co-operative units. Farmers elevators, he contended, should work themselves into a sound financial position so that they can be free of government financing.

THE BANQUET was held in the Chamber of Commerce Wednesday evening. It was followed by an elaborate floor show. O. W. Cole, Xenia, was toastmaster, introducing John Brown, pres. of the Louisville Bank for Co-operatives as the guest of honor, and William Manahan, Defiance, the silver-tongued orator of the Maumee Valley, as the principal speaker.

Members of the Toledo Board of Trade gave the party after the banquet, supplying the music for continuous informal dancing, and providing refreshments so long as delegates sought them.

"THE RETURN of the Swallow," a round-table discussion, led by Oscar J. Weiker, Upper Sandusky, fired on the competitive program of the Ohio Farm Bureau Federation, at the third session, held Thursday forenoon.

R. O. PERRETT, Norwalk, manager of the 9th sales tax district, explained several simplifications which the co-operatives can use in handling sales tax problems, to reduce the amount of clerical labor and expense involved. The details of handling exemptions granted farmers on merchandise purchased for production purposes, were covered. Discussion followed and led to the conclusion that the Farmers Grain Dealers Ass'n and the Ohio Grain, Mill & Feed Dealers Ass'n should work together for elimination of some of the extra detail now required to classify sales.

Alfred Eier, Nevada, talked on "Fishing for New Business," reviewing means for developing trade.

Samuel Jeffry, Shin Rock, left open the

question of whether "Farmers are Brand-Minded" when purchasing supplies.

William Kemmer, Hamler, chairman of the transportation and traffic com'te, reviewed transportation developments, favorably commenting upon the new pick-up-and-delivery service instituted by the railroads.

B. A. WALLACE, Ohio State University, who has kept in close touch with 30 farmers elevators in the state, said they reported a one-third increase in business volume during 1935. Good crops, with fair prices, have prevailed for the last two years, he said.

RESOLUTIONS adopted at the final session Thursday afternoon:

COMMENDED the general sales tax and the income tax as the most equitable means for raising money to support schools and government, but vigorously protested the "extravagant method of collecting the sales tax." The state legislature was implored to simplify the laws governing sales tax collections.

ASKED the federal government to recapture processing taxes and keep them in the federal treasury as an equitable means of returning them to those who paid.

ENDORSED the Jones commodity exchange bill and urged a higher tariff on sugar.

URGED that the federal government cease issuing interest bearing bonds, and finance itself directly by issuing more currency.

APPOINTED to the resolutions com'te for next year were C. W. Palmer, Defiance; L. M. Gove, Avery, and William H. Bricker, Oak Harbor.

ELECTION of officers placed the following for the ensuing year: W. M. Jackson, Holgate, pres.; Charles George, McComb, first vice-pres.; A. G. Patzer, Grove City, second vice-pres. Directors C. W. Palmer, Defiance; George Grover, Rising Sun; Oscar Weiker, Upper Sandusky, were re-elected for three year terms. Other directors are C. B. Krohn, Deshler; J. H. Myers, Westerville; W. G. Guscott, Olmstead Falls; N. G. Bennett, McComb; Geo. Perkins, Perrysburg.

APPOINTED to the transportation com'te for the year were William Kemmer, Hamler, and Harry Lee, Fostoria.

### Convention Notes

REGISTRATION was in charge of representatives of the Mill Mutuals Insurance Agency, which supplied the attractive badges.

DISPLAY TABLES were held by many firms supplying Ohio elevators, and showing salts, lime treatments, fertilizers, twines, oils, feeds, seeds and other items commonly handled by elevators. Sidney Grain Machinery Co. kept catalogs handy and its representatives explained the advantages of modernizing elevators, and feed plants.

### Fruit Jobbers Attack Truck Menace

The Western Fruit Jobbers Ass'n at its recent convention at Kansas City adopted a resolution.

That all branches of the fruit and produce industry view the constantly increasing competition of the itinerant truck dealers with growing concern; that federal regulation in the motor carrier act, which becomes effective April 1, will have little effect in correcting existing and unfair competitive conditions in our industry. That this federal law is restricted and does not bring under its jurisdiction the unregulated merchandiser; that this type of trucker may evade the classification of common carrier and contract carrier by becoming a merchandiser in the buying and selling of products.



# Illinois Farmers Elevators Want Fair Competition

In a series of resolutions at the close of its 33rd annual convention, the Farmers Grain Dealers Ass'n of Illinois, meeting in Chicago, Feb. 11-13, adopted resolutions favoring grading of soybeans by the same agencies that grade grains; use of the No. 10 corn sieve in the mechanical kickers used by inspection departments; commended the grain marketing investigation made by the Farmers National Grain Dealers Ass'n; and pleaded for defeat of the Jones bill in Congress.

## Tuesday Afternoon Session

PRES. H. B. GROMMON, Plainfield, presided at the opening session in the ballroom of the La Salle hotel Tuesday afternoon.

DR. GEO. A. FOWLER, pastor, First M. E. Church, Oak Park, pronounced the invocation.

QUINN O'BRIEN, acting for the mayor, warmly welcomed the delegates.

L. E. RILEY, 1st vice-pres., Pleasant Plains, expressed the appreciation of those in attendance.

SEC'Y LAWRENCE FARLOW, Bloomington, gave his annual report, from which we take the following:

### Sec'y Farlow's Report

In 1935 Illinois farmers' elevators handled about 15% less grain than normal, due to small crops. Average volume per elevator was about 150,000 bus.; average net profits for the year, a little less than \$1,000 per company.

Truck and barge competition continues to be a problem. We are convinced that a bulk commodity like grain, finding its final destination in remote sections of the country, can be handled most economically by rail. Yet large quantities of grain were moved by truck during the first half of 1935 to supply the demand from feeders in nearby, drouth stricken territories. With grain moving in natural channels during the last half of the year the movement by truck was reduced.

Opening of the Illinois River naturally caused building of facilities for barge shipment of surplus grain along the waterway. Substantial quantities were shipped by barge, but there is no evidence that this traffic was profitable to either the farmers or those operating the barge loading elevators. One of the most active of the barge loading firms failed a few months ago, another has shown substantial losses.

The problem of truck and barge competition will never be fully solved until the rail carriers adjust their rates and services to hold their traffic. Until such time the railroads may expect to continue to lose business.

Termination of the country elevator code led many elevators to expect a return of the free storage evil. Investigation has shown that constitutional limitations make it almost impossible to prepare an effective Illinois law to prevent this bad practice.

The Jones Commodity Exchange bill, now pending in Congress, would give the federal government more control over grain exchanges. It would limit trading and reduce the demand for grain, with consequent lowering of prices to the farmers.

The bill would permit a government financed grain corporation to pay so-called dividends to affiliated regionals out of capital borrowed from the government. The bill passed the House at the last session, and is now before the Senate. Every delegate to this convention should vigorously protest passage of this bill.

The research bureau and the commission on grain marketing of the Farmers National Grain Dealers Ass'n, both headed by your own Pres. Grommon, without compensation, has developed a great deal of highly valuable information. The report on marketing represents the most thorough and unbiased survey of grain distribution and marketing agencies that has ever been made.

Your ass'n has maintained a balanced budget. Little change has occurred in membership, and payment of dues has been normal.

T. E. SULLIVAN, Omaha, talked on the "Illinois Workmen's Compensation Law and Insurance Coverage," calling attention to the part care plays in the prevention of accidents and the lowering of insurance rates.

Adjourned to Wednesday morning.

## Annual Banquet

HONORABLE CHARLES ADKINS, Decatur, was the master of ceremonies at the annual banquet, served in the Grand Ball Room Tuesday night.

REV. JOSEPH CLARE, Aurora, led in the group singing and entertainment that preceded the feature of the evening.

HONORABLE JAMES A. REED, former Senator from Missouri, delivered a burning criticism of the many acts of the New Deal which have led the country deeper and deeper into a mire of debt and taxes, filled business and production circles with fear and stagnated the prosperity with which the country should be blessed.

## Wednesday Morning Session

H. A. HENRICKS, Cerro Gordo, vice-pres. of the Managers Club, presided at the second session.

PRES. GROMMON appointed the following com'tes:

NOMINATING: Albert Flaherty, Ladd; E. H. Dannewitz, Somanauk; Chas. Holz, Buckley; Ed. Foley, Tremont; F. Clark Wallbaum, Ashland; Roy Jones, Monticello; C. A. Stout, Moweauqua.

RESOLUTIONS: R. A. Ewing, Malden; John Schumacher, Verona; Harold Morgan, Buckley; J. C. Bocker, Tallula; Wm. Kornick, Emden; S. E. Funk, Milmine; Henry Grieve, Edinburg.

PRES. GROMMON in his annual address said:

### Pres. Grommon's Address

National laws have discriminated against agriculture. High tariff barriers make it difficult for agriculture to trade with foreign industry and our immigration laws keep foreign labor out of this country where it could become a market.

We have the greatest agricultural country in world, with one-half of the natural resources of the world and only one-tenth its population, yet we are importing millions of bushels of grain and millions of pounds of meat that could and should be produced on American farms.

Agriculture is kept in an eternal state of unrest by the leaders of well organized minorities who constantly agitate and are often successful in promoting laws and regulations that hinder, hamper and harass practically every one engaged in lawful business, to the cost of business expense budgets.

In the attempt to secure control of marketing some of our brother "farmers" are trying to take from us our heritage to a free, open, competitive market. They would give us but one place to sell and that would be a monopoly. In the case of grain they seek to win control over marketing by putting out of business those private institutions that are organized for profit.

Power for complete control of marketing is a dangerous thing in any hands. The law preventing monopolies in restraint of trade exempts farm cooperatives. But the farmers cannot afford to lose their open markets.

The Book of Acts tells of circumstances that threatened the image market in Ephesus, and the silversmiths, to save their market, started a great outcry. The cry was not "Save the image market." It was "Great is Diana of the Ephesians." Several minorities in farm groups have been agitating a great cry in this country. The cry is not "Give us monopoly of the grain trade." It is, "Great is the wickedness of the Board of Trade." The present system and instrumentalities of open trading may have its faults. We join in insisting that such faults be corrected voluntarily or forcibly, but we are opposed to any form of monopoly of the grain market.

Many of our problems could be prevented by intelligent foresight and action. Today business and industry could help themselves in no better way than by joining in a search for markets for agricultural products. In the industrial use of agricultural products for non-food uses there is a marketing field that has been scarcely touched.

For what it would cost to establish and maintain a research laboratory for this purpose a

prize could be offered that would set the laboratories of colleges, industries and governments, both here and abroad, in a feverish search for markets for agriculture. Such a prize would turn our minds from restricted production to capacity production and immeasurably add to the wealth of all.

LEW HILL, Indianapolis, chairman of the Uniform Grades Com'te of the Grain & Feed Dealers National Ass'n, reviewed the work of his com'te, saying:

## TROUBLESOME GRADING RULES

"Almost two years have passed since the Department of Agriculture effected new grain grading rules, in the face of vigorous opposition from the grain trade. The changes made little difference in 1933 and 1934, because of the dry condition of the grain crops. But the wet harvest of 1935 brought out many complaints.

"The country shippers had trouble getting their Brown-Duvel machines to check with the Tag-Heppenstall moisture meters used in the terminals. The heat cut-off on the Brown-Duvel was changed from 180 to 190 degrees for soft wheat, but few country dealers learned of this before the first to the middle of August. On shipments of wheat made prior to the change individual elevators lost from \$200 to \$600. Checking of the Brown-Duvel against the Tag at terminals showed variations of from 1/2% to 1% in moisture readings.

"The Buro's chemist states that the additional moisture was present in the grain all the time, only requiring more heat on the Brown-Duvel to bring it out. Other chemists tell us that any added degree of heat in the moisture tester will break down particles of wheat and convert them into moisture. If wheat was satisfactory to processors and millers under the old rules, why call wheat testing over 14% moisture 'tough' simply because a new moisture testing process shows 1/2% to 1% more moisture?

"Musty oats are first on the plan of the Uniform Grades Com'te for the coming year. We will propose to the Buro of Economics that the new standards on oats be left as at present, except that No. 4 oats shall be cool and may be musty, weathered and badly stained.

"The determination of must thru the sense of smell is affected by the human element. Country shippers feel that a faint odor is as likely to be ground odor, bin odor, or straw odor as must. Such odors are easily eliminated at terminals, and by processors. Consequently oats should not be graded down because of odors. The evil might be corrected if some means could be devised that would unquestionably show whether or not oats are musty.

"The Indiana and Michigan ass'n's have appointed grades com'tes to work with the grades com'te of the national ass'n in an attempt to make grading uniform and satisfactory. The Grain & Feed Dealers National Ass'n is making an active effort to carry out the wishes of the trade. If you are not satisfied with the present standards we will make every effort to convince the Buro at Washington that changes are necessary."

FRED G. SMITH, Chicago, Board of Appeals, reviewed the experiences of the Buro with its revised standards. He said:

## CORN SIEVES WILL NOT BE CHANGED

"The changes in the oats grades have not had a fair trial because of the below average quality of most of the oats of the last two crops. The malting barley standards are functioning satisfactorily. The liberalization of the corn grades is working to the advantage of producers, because most of the crop this year would be grading No. 6 under the old standards, whereas it becomes No. 5 under the new.

"At Bloomington last November discussion centered on the grading of oats as Sample Grade because of musty odor. Value cannot be added to an inferior, undesirable commodity simply by assigning a high-sounding name to it, such as "Ne Plus Ultra" or "Extra Choice." Such practice merely debases the standards and destroys confidence in the system of grading.



"The change in the size of the corn sieves on the Emerson Kicker will not be made on this crop, says our Washington office. The West Coast particularly objected to the change, contending that domestic corn would suffer from competition with Argentine corn much more severely than at present if the sieve regulations were changed. Southeastern and New England consumers opposed the changes on similar grounds."

WILLIAM H. McDONALD, pres. Cash Grain Ass'n, Chicago Board of Trade, asked: "Are we permitting the West and the East to dictate our standards?"

MR. SMITH: "The use of the mechanical sieve gives uniformity in grading that is literally impossible with the hand sieve, due to the human element. Thoro hand sieving will give the same results."

Adjourned to 1:30 p. m.

### Wednesday Afternoon Session

PRES. GROMMON presided at the third session.

THOS. Y. WICKHAM, Chicago, member of the American Economic Mission to China, described the possibilities of trade with China, the barriers that must be broken down, the customs, the advantages and the needs of the Orient. Tariffs, silver, and the subsidized trade of other nations he listed as barriers to trade with America.

HUDSON McCARROLL, chief chemist and metallurgist for the Ford Motor Co., described the uses of agricultural products in industry, and showed plastic shapes, such as steering wheels, buttons, panels, and interior body trim, made from soybean meal or straw cellulose. It is Ford's idea, he said, that agriculture and industry are natural partners. Bringing them together will cure the ills of both.

Adjourned to Thursday morning.

### Managers' Club Election

In a brief session Wednesday evening the Managers' Club elected H. A. Henricks, Cerro Gordo, pres.; Meddie Buck, Cropsey, vice-pres., and A. J. Torrie, Seatonville, sec'y.

### Cash Grain Dinner

The Cash Grain Ass'n of the Chicago market entertained in the Grand Ball Room Wednesday evening. An excellent steak dinner

was followed by a high grade entertainment. Soloists demonstrated well-trained ability to reach the high notes, the harmony of a quartette haunted the crowd, a magician mystified and fascinated, and a xylophone player beat out a song for the delegates to sing.

WM. H. McDONALD, pres. of the Cash Grain Ass'n, was toastmaster. He cleverly introduced leading lights, including Pres. Grommon, who unhesitatingly and convincingly expressed his belief in free, open, and competitive markets as the soundest medium for returning to the farmers maximum prices for the products of the farm.

At the close of the entertainment the floor was cleared for dancing that lasted until midnight.

### Thursday Morning Session

PRES. GROMMON presided at the fourth session.

H. G. TAYLOR, Washington, D. C., chairman of the Western Ass'n of Railway Executives, said:

#### TRANSPORTATION CONFERENCE

"The railroads are hopeful. In spite of a federal co-ordinator who insists on expensive investigations, in spite of an Interstate Commerce Commission that exercises an overlordship, in spite of a Reconstruction Finance Corp., which because of a few loans presumes to regulate, in spite of 386 bills in Congress and 74 bills in western states, some of which have passed to add to the burdens and taxes of the carriers, and in spite of 78,000 miles of rail lines in receivership, the railroads still have faith in industry and faith in the future of America.

"Freight schedules have been speeded 50% in the last decade, and the newest venture is free pick-up and delivery service of l.c.l. freight. Costs have been lowered, too, but the savings won in lower costs have been lost in constantly increasing impositions of government, so that they could not be reflected in lower rates. It takes courage to make the improvements and forward steps that have been made by the rails in the face of government interference."

JOHN SCHUMACHER, Verona, pleaded for lower rates, saying: "About two years ago we had a great deal of excitement over trucks. In a number of meetings with representatives of the rail lines, we were met with shaking of

heads, vague promises and no action. Then came the barge line, and one railroad stepped out, agreeing to publish a rate of 6c to compete with the barge line.

"We were not on the road that made the reduction, but in a little while we were able to win a rate of 7c, compared with our previous rate to Chicago of 9½c, which was declared to meet the 'emergency'."

"Until the lower rates were effected we suffered severely from truck competition. But the lower rates immediately wiped out the depredations of trucks carrying grain to terminals from our territory, except for the movement to the barge line.

"Ten miles south of us the old rate was maintained. In that territory the trucks continued to multiply, and have succeeded in so demoralizing the grain trade of the district that the elevator is uncertain whether it will be able to remain open much longer.

"In 1914 we enjoyed a freight rate of 5c per cwt. into Chicago. Elevators with only water transportation had been put out of business by the rail lines. Then came the war, and Senator McAdoo, and our rate went to 9½ cents.

"Except for the 'emergency' our rate is still 9½ cents. And today the railroads haul trains of 160 cars with crews no bigger than were used in the trains of 50 cars that we knew in 1914. Something is wrong."

MR. TAYLOR: "I am familiar with the situation described. Properly lower rates should be expected. But railway labor today consumes 45% of the costs of operation and wages are higher than under McAdoo.

"Railroads must operate as systems. You cannot reduce the rate from Morris to Chicago without affecting the entire territory, which in the end costs a much greater loss of revenue than follows the loss of freight at a few affected points.

"When you ask the railroads alone to solve your problem you ask more than the railroads can grant because of the competitive relationship of its stations."

C. R. LOUIE, New Berlin: "Our elevator is located half way between Springfield and Jacksonville on Route 36 from Illinois into Missouri. Two years ago the Missouri trucks started coming across the river into Illinois looking for grain to take back to their feeders. They moved a great deal of corn and some oats. The trucks limited their purchases to the elevators.

"A year ago the movement of grain by truck increased. There were more and bigger trucks. Some of them went direct to the farms for their grain.

"We have an 11½ cent rate to St. Louis, 12½ cents to Chicago. The trucks offered what we were bid our track. Last year we sold a large volume of grain to the trucks.

"Some of the truck lines are responsible and maintain their equipment. They have paid us a fair price and competition forces us to sell to them.

"We need the railroads, and the railroads must somehow exist. But so must the elevators. Our railroad was unable to offer us satisfactory rates and arrangements for small shipments, so we were forced to sell all of our corn last year to the trucks. This season we have shipped only a small amount of grain by rail, mostly wheat.

"If the rails could extend their pick-up-and-delivery service to bulk grain I believe something could be done about preserving their trade. Carload rates on small lots would help."

GUY ROBERTSON, Atwood, had collected a great deal of specific information in regard to the movement of trucks and the loss of business by rail lines. He said:

#### VOLUME OF TRUCKING

A questionnaire sent to all farmers' elevators in the 6th district has returned the following information:

The average volume of grain and beans trucked out is 13,000 bus. and the average amount of coal trucked in is 500 tons per eleva-



Left to Right: Second Vice-Pres. E. H. Dannewitz, Director Lewis Weber, Pres.-Emeritus H. B. Grommon, First Vice-Pres. Charles Holz, Sec'y Lawrence Farlow, and Director J. A. Henebry



tor. This represents 9 cars of grain and beans, 11 cars of coal, a loss in revenue to the railroads of about \$2,000, and a loss of profit to each elevator of from \$400 to \$500. Of the grain and soy beans handled by trucks, 50% are bought from the elevators and 50% direct from the farmers. Where the greatest amount of coal is trucked in the greatest amount of grain and soy beans is trucked out.

Truckers that start by doing business with the elevator soon turn to the patrons of the elevator. Suggestions for meeting this competition were requested. Three suggested truckers be required to pay a sales tax; three that legislation be enacted to place the trucks under the jurisdiction of the Illinois Commerce Commission; one that truck weights be checked for overloads; one that the elevators go into the trucking business; one that coal trucks be required to give other than mine weights; one that the competition be met with quality products, well advertised to patrons, and one is selling cheap coals, presumably without laying too much stress on their quality.

Where railroad short lines have been abandoned immediate 200% and 300% increases in trucking charges have been noted. I am told that the railroad from Springfield to Beardstown will be abandoned within the next year or two. There are some fine elevators on that line.

One-half the elevators claim they get from 3c to 5c more per bushel for the grain they sell to trucks. Some charge \$1 to \$1.50 per load for weighing truckers who buy direct from farmers. Some refuse to weigh such grain.

Asked why they take no active part in fighting the trucks the railroads say they have been trying to regain the friendship of the public for the last 10 years and an active fight would do them more harm than good. Perhaps the railroads feel that trucks have a place in the shipping business.

The Motor Carriers Act places interstate traffic with trucks under control of the Interstate Commerce Commission. We ought to fight for legislation that will place intra-state traffic under control of the Illinois Commerce Commission. By fixing regular rates on intra-state trucking the state commission would help not only the elevators, but would do many truckers a favor by putting them out of business.

#### NEW OFFICERS

New officers were elected as follows: H. B. Grommon, Plainfield, pres.-emeritus; L. E. Riley, Pleasant Plains, pres.; Charles Holz, Buckley, first vice-pres.; E. H. Dannewitz, Somonauk, second vice-pres.; Charles Fairfield, Fisher, treas. Directors with terms expiring were re-elected, and E. T. Miller, Stanford, was elected a director for one year to fill out the unexpired term of Charles Holz. Other directors are: H. J. Grieve, Edinburg; J. A. Henebry, Plainfield; J. E. McCreery, Mason City; Lee Mellinger, Cerro Gordo; Lewis Weber, Peru; E. P. Foley, Tremont.



H. A. Henricks, Cerro Gordo, Elected Pres. Illinois Managers Club

The resolutions com'ite presented resolutions, which were unanimously adopted:

### Resolutions Adopted

#### Soybean Inspections

Whereas, inspection of soybeans is now under control of the hay, seed and feed division of the Bureau of Agricultural Economics, Department of Agriculture, and

Whereas, the present system lacks sufficient man power for proper administration of soybeans inspection and appeal, and

Whereas, the present production and consumption has become so widespread and has outgrown the present inspection facilities, be it

**RESOLVED**, that we recommend that the inspection of soybeans be included under the grain standards act, as amended.

#### Corn Screens in Grading

Whereas, experimentation has proven that a No. 10 sieve used in the mechanical kicker produces about the same results as a No. 12 hand sieve when used for separating foreign material, including cracked corn from kiln dried corn, therefore be it

**RESOLVED**, that as an emergency measure we urge a revision in the federal grain standards authorizing the use of the 10/64ths screen instead of the 12/64ths screen in order that the producers of grain may receive full commercial value for the corn that is now being marketed.

#### Grain Marketing Investigation

Whereas, a Commission appointed by the Farmers National Grain Dealers Ass'n to conduct an investigation into agencies, laws and regulations pertaining to grain marketing has completed a comprehensive report of its findings, and

Whereas, this report contains a fund of valuable information of interest to all producers and handlers of grain, therefore be it

**RESOLVED**, that we commend the efforts of our pres., Mr. Homer B. Grommon, Chairman of the Commission, and his worthy associates for their thoro research into the problem pertaining to grain marketing, and for the unbiased report which they have rendered, and be it further

**RESOLVED**, that we appreciate the service rendered by Dr. H. C. Filley in the preparation of the report and the consideration given by the University of Nebraska in allowing Dr. Filley the time to perform this valued service.

#### Jones Commodity Bill

Whereas, the purposes of the commodity exchange bill now being considered in our National Congress are, first, to limit trading upon the large grain exchanges which in our opinion would tend to limit the farmers' marketing opportunities, and, second, to permit the Farmers National Grain Corp. to pay so-called dividends out of capital borrowed from the Federal Treasury, and

Whereas, the first proposition appears to be detrimental to grain producers and the second a violation of the laws of economic decency and the principals of cooperative marketing, therefore be it

**RESOLVED**, that we call upon our United States Senators to use their influence to defeat the passage of this bill.

FRANK THEIS, Kansas City, chairman of the Executive Com'ite for Truck Regulation, said: "Unless some constructive effort is made to curb the depredations of the itinerant truckers the country grain elevators, and many of the terminal grain dealers may as well close up shop. We are started on a program for correcting this evil. It will take time to correct it. Meanwhile we need the benefit of your advice and experience, and will reciprocate with ours."

THE HON. CHAS. ADKINS presented out-going Pres. Grommon with a beautiful traveling bag and traveler's toilet set, on behalf of the officers, delegates, and commission men at the convention.

Adjourned *sine die*.

### Attended Chicago Convention

Representing the St. Louis market was H. C. Banks.

MINNEAPOLIS sent R. G. Galseth of Cargill Elevator Co.

FROM MILWAUKEE came A. L. Flanagan, a former pres. of the Milwaukee Grain Exchange.

PEORIA sent Guy F. Luke, Luke Grain Co.; F. L. Barlow, P. B. & C. C. Miles; R. F. Mueller, Mueller Grain Co., and several representatives of Chicago firms.

FROM DECATUR came H. W. Glessner, Baldwin Elevator Co.

GRADING and testing equipment houses were represented by Jim Anderson and Harry B. Olson of Harry B. Olson Co.; W. W. White, C.

C. Hurst, and R. H. Hix. The latter three had a Tag-Heppenstall moisture meter on display.

W. D. CLARK represented Fairbanks-Morse & Co., scale department. Geo. Saathoff and Harry Quick were elevator builders in attendance.

James Wilson III was looking for orders for binder twine.

FROM CRAWFORDSVILLE, Ind., came Harold L. Gray and T. H. Beeson of Crabb-Reynolds-Taylor Co.

INDIANAPOLIS sent G. A. Pritchard and F. K. Sale, pres. and sec'y, respectively, of the Indiana Grain Dealers Ass'n, Ed. K. Shepperd, O. P. Larimore, Lew Hill, and Claude M. Record. Larry Larimore wandered around in a "bear-skin" coat distributing pencils; Ed. Shepperd made a sudden and marvelous recovery from doctor's orders to attend the convention.

J. T. PETERSON and J. D. Stevens, Grain Dealers National Mutual Fire Insurance Co., performed honors at pinning identification badges to coat lapels. Their company supplied the attractive badges. Other insurance company representatives present included A. R. Schroeder, V. R. Johnson and H. H. Parmenier, of the Millers National Fire Insurance Co.

BRANCH OFFICE managers of Chicago firms present included L. K. Hill, Bloomington; D. E. Jacobs, Danville; F. F. Githens, Decatur; T. E. Decker, Kankakee; Homer M. Barlow, Peoria, and M. Lovell, Streator, all of Jas. E. Bennett & Co.; C. J. Schulenburg, De Kalb, Lamson Bros. & Co.; C. H. Stout, Gilman, and D. W. Jones, Kankakee, Lowell Hoit & Co.; A. H. Dysart, Oswego, John West & Co.; Jesse Summers, Rensselaer (Ind.); Ross Livergood, Decatur; Fred Owings, Watseka, and J. L. Mathias, Morris, of E. W. Bailey & Co.

MANAGERS of farmers' elevators and of independent elevators present included: Conrad Linder, Ancona; F. Clark Wallbaum, Ashland; Guy W. Robertson, Atwood; W. B. Fleming, Bement; C. S. Reeser, Benson; Fred L. Jostes, Boody; Elmer Nelson, Bristol; Louis Paulus, Burtonview (Lincoln p. o.); A. C. Clapp, Cabery; E. J. Steele, Cisco; H. A. Henricks, Cerro Gordo; Meddie Buck, Cropsey; Wm. F. Siemons, Del Rey; Harry Scott, DeWitt; O. B. Robbins, Dwight; G. A. Westlake, Elburn; H. J. Greive, Edinburg; Wm. Komnick, Emden; Fred D. Gillespie, Farmer City; Harold B. Steele, Fisher; Laurel Truman, Gifford; Lester Fielding, Hartsburg; A. K. Clark, Hinckley;

J. H. Zink, Kasbeer; Vern Marks, Kempton; John Dunn, Kinsman; A. E. Foster, Ladd; E. A. Johnson and R. J. Jensen, Lee; Chas. Gingerich, Loda; J. E. Abney, Lowder; R. A. Ewing, Malden; H. W. Elliott, Manteno; J. E. McCreery, Mason City; Harold Bjelland, Millbrook; Arthur Dirst, Minooka; Roy Jones, Monticello; W. H. Allen, Morris; C. A. Stout, Moweaqua; Vincent Dunn, Mt. Walsh; Roy Halverson, Newark; C. R. Louie, New Berlin; O. W. Livergood, Niantic; James McMahon, Oceola; Geo. J. Wasem, Patoka; C. E. Miller, Piper City; J. A. Henebry, Plainfield;

Norman F. Butterfield, Ritchie; John J. Minch, Roberts; R. N. Holderman, Seneca; J. D. Worsham, Sheldon; E. H. Dannewitz, Somonauk; Isaac B. Barrett, Streator; Glen D. Marshall, Stronghurst; H. N. Seagrist, Sugar Grove; R. F. Nelson, Tampico; Ben H. Carius, Tremont; Chas. Cochran, Utica; J. H. Schumacher, Verona; J. A. Little, Weedman; S. Oliver Gray, Woodland; F. E. Barkley and W. S. Gray, Yorkville.

### Skepticism of Red Squill Unwarranted

It is interesting and pleasing to learn that some skepticism of the success of red squill as a mice and rat exterminator is being expressed by the trade. This reflects a certain commendable, open-mindedness indicating that conviction is still welcome, and that our readers have confidence in our judgment in the selection of reputable advertisers whom we are not afraid to stand behind. A further inference is that the mice and rat menace prevails in perhaps greater proportions than ever.

The liquid extract of red squill is more than twice as toxic to rats as the powder form. Further, its toxicity has much longer life in the liquid form. Each lot of red squill exterminator going to the trade is biologically tested to permit guaranteeing its potency with perfect safety. It is scientifically made and flavored to entice these rodents.

The only feature (really a commendable one) which would prompt questioning the value of the squill, is that the rats go into the open to die, seeking fresh air and water, neither of which helps to save them from death. Consequently there are no undesirable odors or bodies around to convince the user of its effectiveness.

It is strongly urged that instructions be closely followed for 100% efficient results.



## A Fast Handling Minnesota Elevator

The attractive 25,000 bus. grain elevator, feed mill and warehouse constructed by the T. E. Ibberson Co. for the Dodge Center Elevator Co. of Dodge Center, Minn., is illustrated herewith.

The Dodge Center Elevator Co. has been operating an elevator of the flat house type and because of the increase in business they were forced to build a structure that was large enough to handle the retail trade they have at this time.

The new elevator has 16 bins in all. On each side of the workfloor are 3 deep bins, and 6 overhead hopper bins with 4 special retail bins constructed on the side of the elevator, so that grain can be delivered direct to the wagons and trucks by gravity, eliminating the re-elevation of the grain. These retail bins hold approximately 500 bus.

The elevator is equipped with one fast leg that will handle approximately 3,000 bus. per hour. The head drive is of the improved type and power is furnished by Fairbanks-Morse motors. The receiving scale is a 10 ton, 18' Fairbanks-Morse dump-scale. The shipping scale is a 60 bus. hopper scale located on the workfloor. A modern manlift gives easy access to the cupola.

The driveway is straight 14' wide and the door openings are 12'-6" from the floor to the headers. All precaution has been taken for the handling of large stock racks through this driveway.

All driveway doors are fitted with special builders' hardware with off-set hinges, so that when open the doors automatically swing behind the door posts so as to eliminate all possibilities of any truck bodies, or racks catching on same when they enter, or leave the driveway.

The office 14x24' is one large room with special counters and tables built in. The interior of the office is finished with a ply wood with a natural oil finish and all doors and window casings have been stained mahogany.

The warehouse that is built adjoining this elevator has capacity enough to handle 6 car-ard warehouse windows installed in same, giving plenty of light.

Joined on to the end of this warehouse is a most compact feed mill. It consists of 6 bins, which are made up of 3 bins over the feed mill, 2 sacking bins and a bulk bin with spout direct to wagons, or trucks for ground feed. This feed mill is equipped with all the latest machinery, such as attrition mill, hammer mill, scalp-ers, corn crushers, crackers, as well as a feed mixer. A full basement gives easy access to all working parts of machinery in this portion of the building.

The entire plant is covered with No. 26 gauge galvanized iron.

Dodge Center is located on the Chicago & Northwestern Railroad between Owatonna and Rochester.

Mr. A. O. Olson, the owner of this property, carries a full line of commercial feeds. The largest box cars can be loaded to capacity and evenly trimmed without a shovel.

## Exchange Against Government Ownership of Railroads

The directors of the Kansas City Board of Trade have adopted a resolution "that government ownership or control of our railroads should be condemned as injurious to the private shipper and opposed to the public interest."

The directors point out that: "The control of the railroads by the government during the World War is all the test needed to demonstrate the utter undesirability of changing the present system of private ownership to one of government control in any direct way whatsoever.

"Experience of all government operated institutions is a record of waste and inefficiency, and there is no reason to think that government ownership of railroads would be otherwise. It would be certain to increase taxes to be paid by the public and would raise grave problems of revenue for local governing units. The bureaucracy which would result would be an added burden upon the public and a constant invitation to political interference.

"The competitive system of private ownership of transportation facilities is greatly to be desired by all business men, and the destruction of competition under any plan of direct government control would result in great injury to shipping interests."

## The First Grain Elevator

Chroniclers of those early days were not aware of the revolutionary step in grain handling marked by the introduction of the elevator leg, and the early history of the first grain elevator is fragmentary.

Buffalo was the situs and 1842 the year that Joseph Dart installed for the sole elevation of grain, a leg copying that Oliver Evans, the famous flour mill inventor, had perfected in 1785.

Necessity led to the introduction. Vessels were wasting one-fourth of their time in Buffalo harbor waiting for men with baskets on their shoulders to carry the grain that had been raised in barrels by block and tackle from the holds. In a single day with a full set of hands only 1,800 to 2,000 bus. could be unloaded.

Amid great difficulties, discouragements and delays, Dart began the work of erecting the building on Buffalo Creek, in the autumn of 1842. To aid him in solving the engineering problems, Dart called in Robert Dunbar, a native of Fifeshire, Scotland. He was a mechanical engineer. As Dart conceived the various parts of his contrivance, Dunbar would work them out in practical form.

Among the scoffers was Mahlon Kingman, a forwarding merchant of Buffalo, who had designed an elevator to be run by horse power in a warehouse previously built for ordinary storage purposes. He made an attempt, but never was able to unload a vessel with it. He soured on the proposition, scoffing at Dart. "Dart, I am sorry for you. I have been thru that mill. It won't do. Remember what I say—Irishmen's backs are the cheapest elevators ever built!"

Dart, of course, continued his efforts, and built his steam power elevator. When it was finished and in operation, Kingman came to him to get two canal boats unloaded. Dart reminded him of the speech he had wished remembered. Kingman replied, "Dart, I find I did not know it all."

Dart's elevator had a storage capacity of 60,000 bus., and unloaded cargoes not greater than 8,000 bus., which is a fraction of those now carried by the steel tankers of the Great Lakes.

The first experiment of unloading the schooner J. B. Skinner was never finished. The first vessel actually unloaded by Dart's elevator was the Philadelphia, Capt. Chas. Rogers, with 4,515 bus. of wheat consigned to Kinne & Davis.

A few years after Dart's elevator there was built the Evans Elevator, now known as the Monarch Elevator Annex and now operated by the Monarch Elevator Corporation. The Evans is a connecting link with the early days of the port, and is still in active service tho, as Vice Pres. John B. Stouten informs us, with electricity as power and its elevator legs and conveying machinery speeded up from time to time.

Grain dealers weighing for commercial truckers should charge at least 25 cents each way or 50 cents a load.—J. N. Campbell, sec'y Nebraska Grain Dealers Ass'n.

The break in the price of cotton in March, 1935, was laid to government tinkering by W. L. Clayton of Houston, Tex., who told the senate agricultural com'te Feb. 17: "For the last six years there has been no cotton market in the traditional sense that prices are normally established by competitive buying and selling. During that whole period the predominant price influence has been the hand and voice of the government. The market has gone up and down, not because of changing conditions of supply and demand, but in response to governmental moves in cotton and to statements of government officials or rumors thereof regarding the loan policy or the cotton control policy. Experience, judgment and discretion in fixing merchandising and manufacturing policies of cotton have given way to a guessing contest as to what the next governmental 'move will be.'"



A Well Equipped Minnesota Elevator and Feed Mill



# Minnesotans Condemn Trucking; Expand Services

Hearty natives of the Gopher state braved wintry blasts to attend the twenty-ninth annual convention of the Minnesota Farmers Elevator Ass'n, at Minneapolis, by every possible conveyance, notwithstanding train service in many sections had been cancelled, swelled the attendance to gratifying numbers on Feb. 18, 19, and 20, at the West Hotel, Minneapolis. Festooned with gala colored equipment displays on the lobby and mezzanine floors, the purring of moving machinery and the buzzing of mingled voices presented a stimulating evidence of better business prospects.

PRESIDENT OSCAR A. OLSON, Truman, presided over the well filled convention hall, and following the welcome to the city gave his annual address from which we take the following:

## PRES. OLSON RAPS TRUCKERS

**Splendid progress** has been made by the farmers elevators of this state this past year in carrying on their business with better business methods. I find most elevators are succeeding in doing business more nearly on a cash basis; more elevators than ever before are having annual audits by competent certified accountants; many are adding more sidelines which is a very healthy sign as it is extending the services the elevators can render to its patrons; it gives greater income from more sources, the same as diversified farming applied to modern agriculture; it gives the elevators an opportunity to give maximum employment to its employees the year round.

The Service Letters sent out by our Sec'y have been of very great aid in this educational program and largely responsible in getting these facts to our elevators as well as its officers, stockholders and patrons.

**The trucking situation.**—We all know that the trucking is here to stay, and is an essential cog in our modern transportation, but we do believe it should be kept in its proper limitation. We are now at the crossroads. If we are going to continue the development of trucking of unlimited heavy loads regardless of weight or distance over public highways, doing millions of dollars of damage to our present hard surfaced roads, as they are not built for this heavy transportation, and if we get years of normal rainfall with soft road beds, this damage is going to be multiplied many fold, so that it will mean, in the near future, the building of more durable hard surfaced roads, making it necessary to bond this state for hundreds of millions of dollars on top of our already unbearable state indebtedness.

It will mean, with the present system, that the hazards due to these mammoth trucks congesting our highways, accidents are going to be greatly increased, instead of making the highways more safe for the public, which is the cry of the day. It is going to mean the ultimate ruin of the country elevator, lumber yard and coal dealer, resulting in abandonment of large mileages of railroads as it is the business of these industries over the present railroads which pay most of the freight from which the railroad gets most of its operating expense. It is found where railroads have been abandoned, that trucking has utterly failed as a substitute for the railroad, and the result has been the rapid deterioration of the small towns along railroads that have been abandoned in both business and property values as well as the property values of surrounding agricultural land. If carried further, trucking will also terminate in only a "peddlers market" for the products of our farms because it will decentralize and destroy our already very efficient central markets which it has taken years to build, and where our products are sold by men of high training and buyers are forced to gather there and compete with each other in purchase of their wants. It is very pleasing that people are so rapidly beginning to realize this menace, and I believe we are going to see its correction in the near future, because in the state of Texas where general trucking has been limited to loads of seven thousand pounds over a haul of more than fifteen miles, it has not only added to public safety on the highways, but railroads have been able to reduce freight rates about 50%.

Agriculture is the basic industry of our country and unless it prospers we cannot enjoy prosperity as a whole, we are wholehearted in support of any new uses for farm products that can be profitably employed commercially; also any other agricultural crops that can be profitably substituted for crops of which there is a surplus and also the expansion of sales of all

farm products as can be profitably carried out.

I believe that accomplishments of our Ass'n are going to be much greater in the coming year than in the past, and again I wish to thank you for your wholehearted support.

SECRETARY A. F. NELSON, Minneapolis, followed with his annual report, saying:

## SEC'Y NELSON REPORTS ENCOURAGING PROGRESS

**Membership.**—We are enjoying a stronger, more loyal and satisfied membership than we ever have in the history of our Ass'n. We also have a large number of independent elevators that have become associate members for the purpose of receiving such service as may be advantageous and of mutual benefit. More and more it is becoming apparent that all country elevators, regardless of type, must on certain problems work together for the benefit of the entire industry.

**Our Service Letter** has built up a contact between your state office and the officers of local boards. The local officers are beginning to realize and appreciate more fully the work that is being done. It brings about a more friendly relation between the state Association and local members.

**Enforcement of Sec. 8, Paragraph 5** of the Agricultural Adjustment Act, which Act prohibits the shipment of stored grain without prior surrender of the storage ticket, would cause a congestion of grain in farmers elevators which would be a distinct loss to members of cooperative elevators. We presented evidence to indicate that this Law appeared to be designed especially to embarrass and harass local elevators. As a result of this hearing, and we believe that the effort put forth by this Ass'n had a great deal to do in bringing it about, a proclamation was issued by Secretary Wallace which gave an interpretation of this law that was entirely satisfactory.

Advices have recently been received from Washington announcing that the President has cancelled these regulations as proclaimed by the Secretary of Agriculture in September, 1933. It will be remembered that by virtue of this proclamation, country elevators were permitted to ship out stored grain in accordance with certain stipulated conditions. Cancellation of this order by the President, presumably leaves the warehousing clause of the Agricultural Adjustment Act in full force. **THIS PROHIBITS THE SHIPMENT OF STORED GRAIN WITHOUT THE PRIOR SURRENDER OF THE STORAGE TICKET.** This Association is co-operating with other organizations in an effort to effect some arrangement whereby enforcement of this measure will not work a hardship. The law is plain and Washington authorities have indicated that they have no alternative but to enforce it.

**Elevator War Claims.**—Efforts were made during the past year to revive the demand on Congress to pay the claims of local farmers' cooperative elevators from the middle west for storage and insurance of grain during the war period. You will recollect that during the war, all country elevators were under contract to ship grain only on government orders. Certain delays occurred which put the country elevators to a large expense, for storage and insurance. Line companies were promptly reimbursed for their outlay of money. Only a few of the farmers elevators have been paid. Our attorneys have claims aggregating in the neighborhood of half a million dollars owing and due local elevators.

A resolution was introduced at the last session of Congress authorizing payment of these claims, which passed the Senate unanimously. Time did not permit the bill to get action by the House before adjournment, but will be taken up again at this session of Congress, when we are in hopes that favorable action will be taken authorizing payment of these fifteen year old claims.

**Transportation by Truck.**—A number of elevators in some parts of the country are putting on a trucking service to meet this competition, going out to the farm and getting the grain from the threshing machine or farm warehouse.

**The Manager.**—Perhaps no one man is subject to so much abuse and criticism as this man, who is the center of nearly every attack made on a farmers elevator. If he is working in harmony with his Board of Directors, which he must do in order to succeed he must necessarily represent, and have his finger on the public pulse. The average manager is a leader in his community. Very frequently we find him holding positions of trust—a director in his local bank, a member of the board of education, a member of the city council, possibly mayor, or a member of the county commissioners, and a pillar in church and community life. All of

these cases show the standing and high esteem in which this man is held by his associates.

A state organization is a SERVICE organization. It cannot be anything else. It must necessarily be free from politics. It must have only one paramount purpose—SERVICE TO ITS MEMBERS. The state organization is a clearing house. A place where its members can go for dependable and reliable information, not colored by personal interests or prejudice. The service rendered by the Association depends largely on the use that the members themselves make of the Ass'n.

## SEED SCARCITY DISCUSSED

PROF. E. R. AUSEMUS, Agronomist, University Farm, St. Paul, in opening the second business session Tuesday afternoon, warned of the scarcity of sturdy, heavy seed, and outlined the seed experimental work done recently in the state. He is quoted at length on our pages devoted to field seeds.

PROF. CRIM, corn specialist of the same institution, warned the weather during the past 60 days has killed the seed corn and now the Northwest is faced with an acute seed shortage. Even the seed houses lost millions of bushels of seed corn. He also urged the elevators to get farmers to test their seed, and not to plant seed lower in germination than 75-80%, and to plant it thicker.

There is some early (flinty) type corn still in cribs, he said, which will have a chance to live through this cold weather, and will yield relatively high. There is a big supply of the popular wet type of corn that will rot before it will even be usable as feed. It's a good thing not to have it, for it's an undesirable type even though it yields more bushels to the acre.

## GOVERNMENT HAS SOME SEED LEFT

C. G. FRANKS, Manager, Federal Surplus Commodities Corp., Minneapolis, recited the government seed grain program of 1935-6, stated they've sold 13,000,000 out of the 20,000,000 bushels of seed grains originally bought and that the balance is going fast.

Further attractiveness of government seed is the seed loan measure granting credit and halved rail rates on emergency seed. Bulkhead cars or sacked lots are available.

## SERVICE DEPARTMENT ORGANIZED

A private meeting of members then agreed to a constitution and by-laws for a new service association, to sell side lines to member elevators and rebate dividends of savings.

Social securities act and income tax problems were discussed by elevator officers and directors in a special meeting held Tuesday evening.

## URGES SEED TREATMENT BY ELEVATORS

PROF. R. C. ROSE, Extension Plant Pathologist, urged elevator operators to install equipment for treating more seed for the farmers, both because of the prevalence of disease and because the treatment stimulates germination. Warning was given against inhaling the poisonous fumes from the dust—which turns into a gas, and it was suggested that treating equipment be kept out-of-doors to avoid such danger. Treated seed must not be fed. Advertising this seed treating service in local newspapers brings in new customers as well as increases and improves the coming crop.

## BARLEY SEED AND GRADES DISCUSSED

R. C. BLACK, Federal Grain Supervisor, U. S. D. A., Minneapolis, Minn., discussed in detail barley and barley grades. He is quoted elsewhere in this number.

## Wednesday Afternoon Session

VOCAL and Marimba selections opened the fourth business session Wednesday afternoon, the Chamber of Commerce artists giving the convention a real musical treat.

A plea for clear thinking on the proposed dismemberment of the M. & St. L. R. R. was made by F. K. Gage of Fairfax, who predicted the rapid decline of property values along the old right-of-way, the ruin of the small town which is the backbone of this country as well as of farm land values.

Without emphasis on highway safety because



of cumbersome trucks, Mr. Gage cited that in one section of Missouri the elevators found they had lost 80% of their business to trucks, which subtle warning awakened many to the gravity of the situation.

#### INCOME TAX PROBLEMS

A. W. CHRISTGAU, Ass't Chief, Income Tax Division, suggested that all questions be directed to the federal department by mail, then predicted the income tax (not applicable to co-op. elevators) will be here for many years.

B. E. GROOM gave the same talk as at the North Dakota meeting about old cotton acreage in south going into competitive food and feed crops.

#### TRUCKING VS. RAILROADS

KNUTE WEFALD, St. Paul, member of the Minnesota Railroad & Warehouse Commission, in weighing the probability of the trucking industry overshadowing the railroads of the country, cited that the railroads were greatly over-capitalized; that the trucking interests were strongly entrenched politically and would help pen any future anti-truck legislation; that railroads could compete with trucks if they desired to; that railroad rates are going up; that the railroads will never again make the big money they once did nor will they ever control the various state railroad commissions, and that government ownership of the railroads is predestined.

#### CHEMIST HELPING FARMER

The annual banquet Wednesday evening was a gala affair, complicated by the appearance of 450 of the 600 registered guests when but 300 had been expected. Singing orchestral boys and girls, dancers, community hymns, etc., added to the hilarity. A humorous entertainer, Frank Madden, had a lot of fun with the subject of "The Forgotten Man."

L. F. LIVINGSTON, Wilmington, Del., President of the American Society of Agricultural Engineers, and manager of the agricultural extension section of the explosives department of the E. I. Du Pont De Nemours & Co., spoke on the "Effect of Research Work on Agriculture."

#### ELEVATOR ADS PAY

H. W. WECHSLER, Nassau, opened the fifth business session on Thursday morning on the "Value of Advertising to a Farmers Elevator." He issues a monthly mimeographed sheet to all the farmers in his community, there being no local paper in the town. He oftentimes misses a few on the list to see if they will complain for then he knows they are reading it. His patrons look forward to its arrival and invariably ask for it days before it is due.

The results from such advertising are most gratifying. It is an asset to the feed mixer business and to trading wheat for flour, both of which lines Mr. Wechsler claims are quite worth while. He advertises even the smaller items in his side lines and always finds sales increase in direct proportion to the ad space allotted. Consistency of advertising is what brings in the border-line prospective customers.

Mr. Wechsler also runs ads for other merchants in town which about pays for the space given to their products, and he also accepts ads from wholesale firms.

An annual FARMERS day, one for all farmers in the community, given by all the merchants (and held the same day the Elevator holds its annual stockholders meeting) with a free lunch, movies, games, etc., always brings good returns, a good turnout at the elevator meeting, and renewed acquaintances that might win new customers.

BERT MILLIGAN, Westbrook, looks upon advertising as an investment, and one which may be either good or bad. Wise advertising brings in business from the outside territory, it sells merchandise out of season, and pays at least 500% dividends.

ADVERTISE YOUR TELEPHONE NUMBER, he admonished both country and city

dwellers, and cited several instances to prove his conviction.

Stock or stereotyped ads are so much "junk" to Mr. Milligan. Instead he adds a personal touch, something original. He starts his column with "Bert Milligan Says," and insists whether he's right or wrong the readers of the weekly newspaper do look forward with curiosity as to what he's going to have to say the next issue. Sometimes he says something silly, humorous, wise, etc.

Inventory every Saturday night is the rule at Mr. Milligan's elevator and if some item is found not to be moving rapidly enough, then they push it extra hard in their advertising and off the shelves it goes.

FRANK WHITE, Marshall, President of the Minnesota Farm Bureau, suggested that elevator operators study the new proposed farm bill and compare with previous crop acreages in order to be prepared for any changes that may take place.

The federal government plans to cut grain acreage and increase that planted to grasses. An increase in roughage will mean an increase in livestock. The ever-normal granary will also mean more feeding, and will affect the tonnage elevators now handle.

Truckers have found special markets that the railroads reach only in a roundabout course, which is another economic factor with which the elevators must cope. While time always brings changes, he suggested that the grain dealers do as the creameries have done in meeting the trucking problem, i.e., buy their own trucks and keep the business in their territory coming into their elevator.

H. K. MANSFIELD, Omaha, Neb., in speaking about a bond for the manager, reminded Boards of Directors that they were the heads of the business and were responsible for the conduct of the business, and that therefore it behooved them to know all about the business.

"PAY YOUR MANAGERS a sufficient salary," he warned, "and you'll find the business shows a better profit at the end of the year." He also suggested that an audit was a good investment.

#### RESOLUTIONS

Resolutions were the first order of business at the sixth business session, Thursday afternoon, the first of which favored the relieving of the elevator of the free collection agency services they are now forced to render by planning to get a bill through the legislature making a collection service fee legal. In presenting this thought, Theo. Fredrickson stated the elevators now have to employ an extra man to look after liens, mortgages, etc. "Credit makes enemies, and cash makes friends." He bitterly condemned the extension of excessive credit by federal and other agencies for, he said, "the land supplies its own seed." He favored a resolution eliminating all farm crop mortgages entirely. When an elevator is so located that business comes from four or five counties it makes information on mortgages and liens too costly, and then does not cover the itinerant trucker.

#### RESOLUTIONS ADOPTED

The convention adopted resolutions approving the proposed state law placing restriction on truckers; urging continuance of the low 3½% rate on interest by the Farm Credit Administration; that the farmers elevator ass'ns, as the true representatives of the farmers, be accorded hearings before legislative bodies; opposing legislation that will impair the free functioning of the grain futures markets; demanding elimination of unreasonable railroad charges on grain consigned to Minneapolis; thanking the railroads for the 50% reduction in the rate on government seed; reiterating opposition to the grain storage law of the AAA; that local farmers elevator companies make greater use of the services of the Ass'n; expressing appreciation of the relief obtained by the Minneapolis receivers in the change in in-

spection cut-off from 11 to 9 o'clock a. m.; asking the railroads to put in tariffs for mixed carloads of seeds, feeds and other side line commodities.

The treasury statement showed a balance a year ago of \$484.19, receipts of \$8,534.15, expenditures of \$8,572.03, and a present balance of \$446.31.

#### NEW OFFICERS

The election of directors to replace three whose terms expired resulted in the re-election of Theo. Fredrickson, Murdock; the re-election of A. F. Nelson, Minneapolis, and the election of O. A. Olstad, Rothsay, to replace Fred Seidensticker of Wheaton. The directors then elected the following officers:

Oscar A. Olson, Truman, was re-elected president; H. A. Fredrickson, Windom, was elected vice-president; J. E. Brin, Stewartville, was elected treasurer, and A. F. Nelson, Minneapolis, was re-elected secretary.

#### Convention Notes

Proper cooping of a box car, a demonstration on grading and unloading a car of grain, and the inside workings of a terminal elevator were shown to many of the delegates at the Cargill elevator. The company states they find from past experience that a great many valuable and helpful pointers are picked up by those attending such demonstrations.

#### Exhibits

The lobby and balcony floors of the convention hotel were a gala sight with colorful equipment of all classes in action, all vying for attention.

FAIRBANKS MORSE & CO. displayed a large dial scale with the new printomatic weigher, a diesel engine, and various types of motors. Everyone passing the scale succumbed to the impulse of getting weighed, and were rewarded with a printed ticket. A. C. Thompson, A. C. Berry, J. M. Heinen, Walter Bellis, A. J. Larson, A. Gordon and A. Munson attended the display.

CONSOLIDATED PRODUCTS CO. displayed semi-solid buttermilk for animal feeding. A contest was run and the attractive special booth attended by E. P. Lang and J. M. Sechser.

MAYO'S SNOW FLAKE OYSTER SHELL showed samples of their product ground in various finenesses. R. O. Leech explained the superiorities of the product.

T. E. IBBERTSON CO., elevator builders, decorated their booth with photographs of some of the many country elevators they have built recently throughout seven or eight states. In addition to the entertainment furnished by "Kiffe's" magic tricks, noisemakers and ashtrays were distributed. Earl, Tom and Ralph Ibbertson, Fred Holtby, Clarence Kiffe and Tony Westby took turns in taking orders for new elevators.

NORTHROP KING & CO. displayed farm seeds and feeds.

CARGILL'S SEED DIVISION displayed bag and sample box lots of their popular brand of seed.

J. J. GERBER'S distributor was demonstrated in model form, along with the buckets, spouting and spout liners for patching wornout spouting.

R. R. HOWELL & CO. showed cups, pillow blocks, bearings, a seed treating device and mixing spout, a model head drive, and other general elevator supplies. Lyle Feldman, Walter Kostick, Jack Johnson, Bill Hinckley and E. M. Mueller attended the booth and distributed pencils.

HART-CARTER CO. sold two of the four cleaning machines they had on demonstration to the Moorhead (Minn.) Farmers Elevator Co. One was a Carter disc and cylinder separator, a Carter disc clover machine, a Hart Uni-Flow grain separator, and a Rosco-Ajax oat huller. Vic Reid, West Strutt, Edw. Schatz and C. C.



## For Independence of the Farmers Elevator

[Excerpts from address by C. H. Conaway, Starkweather, N. D., pres., and now sec'y of North Dakota Farmers Grain Dealers Ass'n.]

I have been constantly on the defense since taking the reins of office and have consistently tried to defend the right of our individual units to work out their own destiny in their own way.

The farmers elevator must be sufficient unto itself, that is, it must stand or fall on its own merits. This is my view and my belief. I am certain that its destiny is not bound up in a strange leadership leading to the goal of uncertainty and doubt. There has never been a question in my mind but that the destiny and worth of the farmers elevator is bound up in the hope and desire of its stockholders. No alliance or expansion is possible without impairing the service to its patrons. It was preconceived by a community as a co-operative unit and nursed to maturity in the same spirit. Its patrons are its guardians and no delegation of power should ever be given tending to surrender that guardianship. In every case where this has been done a sinister or selfish policy of aggression has destroyed it altogether or made it a prey to those who would destroy. My duty as the head of this Ass'n has led me to combat that tendency to follow an uncharted course. In this duty I have had some unpleasant experiences and have made a few enemies. Why lower your own standard of co-operation by absorbing the vicious practices of another? It is better to lead than to follow.

We have been accused of being an enemy of co-operation in our refusal to commit our membership to a certain course of action, we have been accused of betraying our clients by preserving their independence as a unit and we have been accused of bad faith in not supporting a set-up fostered by considerable number of our patrons but our actions are regulated by the articles of incorporation and declaration of principles of this Ass'n; further than that we cannot go. Every statement we have made has brought its comment for and against the view expressed. We have always endeavored to express the view of a majority whenever we know what that view is.

Public policy is made and preserved by a full, free and unrestricted discussion of principle and no man is always right in his view. It has been my desire to please but not to quibble our public affairs, it has been my desire to appease my enemies and soothe their wounds, it has been my desire to promote any worthy principle dealing with affairs but never have I had one conscious thought of doing injury to anyone, because he or she did not agree with me.

The position of a leader in this business or any other is not a proverbial bed of roses. You are often condemned if you do decide an issue and you may be equally condemned if you don't. It is on convention dates that we gather fresh fuel for the fight ahead. New ideas spring from older heads in the business, new conditions make for better and more efficient government of affairs and new remedies are often more potent than the old. Progress is the order of the day.

**Producers Better Off Without A.A.A.**—If I may be permitted to express my own opinion, I will say now that I believe the producers' interest did not lie in the retention of that Act but may be improved by its nullification. You remember the N.R.A. and its system of codes. When the court decided against it, business reacted as would a stream when the dam has burst. Business activity has been stimulated by the removal of the tentacles that bound it. Is it too much to hope that agriculture will respond in the same measure to the removal of the bonds of dictatorship? Have you seen any evidence of a predicted return to 30c wheat and 6c cotton?

We are not unmindful of the fact that a new program for the relief of agriculture is now in the making. We do believe that one is nec-

essary. I hope that the experiences of at least two major efforts at relief will have some influence on those persons drafting the new measure. I am sure every "farm leader" of importance was called into conference at Washington. This group is becoming so well known to the people of this country that it is no longer necessary to point out their names in the paper even tho they seem to get there anyway. I can notice one redeeming feature about the whole business and that is the headline is getting smaller each time the list is printed. No other need apply, every scheme of regimentation for the farmer is canned and stacked away; when the fruit of the farmers' program becomes frosted, they open up another can. Yes, we have can openers in Washington.

**Taxations.**—I do not hesitate to say that business in general is on the mend. The only serious obstacle to full recovery is the necessity for a crushing tax burden. This condition was brought about by the impatience of our people in time of trouble. Temporary measures of relief have left us with a national and local debt unsurpassed in our history. I do not believe that any political party is responsible for our recent troubles or for our present optimistic viewpoint and reality.

**Too Much Regulation.**—One of the obstacles in the way of perfect harmony, not only in this business but in every other, is the fact that this country has gone regulation mad. We have attempted to regulate banking because the individual banker has shown some signs of becoming rich. We have regulated the railroads until they are now a public charge. We have tried to regulate the farmer to conform to all the other regulations. We have regulated public utilities, insurance, communication and have but few business activities of the nation left to regulate. There are those who tell us now that regulation will be complete when commodity exchanges are under the hammer. I am inclined to believe that for every attempt at regulation at least one investigation will have to be made and when the cycle of investigation is complete we may attempt another round of regulation. Government might be made simple once more if we could convince our officials that it is highly improper to peep over the transom of every home in the land.

## Instructs Congressmen

M. W. Thatcher, a lobbyist at Washington drawing pay from the Farmers National Grain Corporation, told the Senate Agricultural Com'te Jan. 14 that he wanted the commodity exchange bill to be passed.

Apparently as an argument in favor of enactment of the bill he stated to the com'te that he would not be surprised to see wheat go off 30 to 40 cents per bushel in the next few months.

Advocates of legislation destructive to business and industry have about exhausted this play upon fear. For two years they have said "Pass my bill, or else \* \* \*"

The case for the enactment of the commodity exchange bill must be very poor indeed, when threat of 30 cent wheat is promised as punishment. The only effect the commodity exchange bill could have if enacted would be to restrict the market and to drive out the buyers who sustain the price. If let alone the domestic price of wheat will adjust itself to the supply and demand. How little ground there is for expecting a drop of 30 to 40 cents per bushel is evident from a consideration of the price of wheat in importing countries.

Since May last year wheat has advanced 18 cents per bushel at Liverpool, and 30 cents at Rotterdam and Buenos Aires, where investors are unrestrained by threats from would-be dictators and lobbyists.

Foreign demand will prevent any 40-cent drop in the price of United States wheat just as it is bolstering the price of Canadian wheat.

St. Cyr gave demonstrations and passed out attractive leather covered match boxes.

**STRONG-SCOTT MFG. CO.** exhibited one of their head drives, a feeder scalper with magnetic separator, boot, leg and head. An attrition mill with attached dust collector, a sample barley pearler, and a seed treater were among other of their general and special items shown. Lucien Strong, Emil Fredrikson, Bill Sewell, Sig Fagen, Geo. Brown and E. Orvis represented the company.

**SUPERIOR SEPARATOR CO.** showed a terminal and a country cylinder separator and also some model parts to demonstrate the cleaning principle involved. C. C. Gray, Vic Oliver and B. J. Nelson attended the exhibit.

**GROSETH - ERICKSON - HALL CO.** showed their "Grademaker" cleaner for country elevators. John Groseth and his son explained its operations.

**HOWE SCALE CO.** showed their grain beam with the new "weightograph," which magnifies the reading so that the farmer on the truck can read it and so the weigher does not have to make any additions in computing the weight. A platform scale and a bag truck were also shown and the booth was attended by E. E. Johnson, Lauren Pollock, Geo. Swanson and John Van Nice.

**LINDSAY BROS.** displayed "Plymouth" twine.

**GUSTAFSON SEED GRAIN TREATER CO.** showed one of their machines.

**AMERICAN GRAIN FUMIGANT** had an exhibit of some of the many "bugs" that get into the grain.

**J. H. FISCH CO.** showed many pictures of elevators in the process of being moved to new locations, either in the same town or far away. J. H. and L. H. Fisch and W. M. Fankhanel explained their methods and the economic advantages of doing such work, and distributed key cases.

**DICKINSON FEED & SEED CO.** devoted their space to their line of feed and seed samples, inoculents, etc.

## Handling Malting Barley

By **ROBERT H. BLACK**, federal grain supervisor, before Farmers Elevator Ass'n of Minnesota.

Studies made of the average Minneapolis cash prices paid for No. 2 malting barley and for No. 2 barley which did not grade in the sub-class malting, show a higher price paid for the No. 2 malting barley than for the No. 2 barley. During the period July-September, 1934, this price difference was from 5 to 10c premium in favor of No. 2 malting barley over No. 2 barley. A similar price study made of the average prices paid for each of the numerical grades showed an actual cash price difference between any two numerical grades.

Just as long as buyers have their individual fancies for certain qualities which they believe they see in individual lots of barley, and just as long as malt is used for so many various purposes, we will have an over-lapping of prices paid for adjoining grades of barley.

In spite of the fact that they are in the grain business, and have access to information as to what the market and malster want, occasionally there are local grain buyers who buy, bin and load out barley without segregating distinctly different qualities. A limited number of bins for barley may excuse part of this practice. This condition is one which should be corrected because it results in the market losing good barley and the grower of good barley is penalized and no incentive is provided for better quality farm production.

Communities with keen, alert buyers who know barley, plus farmers who know and approve of a buyer discounting poor grain, are leading the way in the movement toward better barley and better, more equitable prices.

Any barley improvement program should be made a joint concern of farmers and local elevator managers. The interests of the two are so completely interwoven that one cannot succeed without the other.



## Suggestions for Lubrication

Though this seems to be a spending age, the virtue of saving is not entirely gone. The man who does not save for himself is inviting trouble. The man who does not save for his employer is inviting even more trouble.

A general discussion of Lubrication, with particular reference to mills and grain elevators, would seem of benefit. Too many oilers, and their superiors also, give little or no thought to the why or the wherefore of oil. As with most things, there is a very good reason for lubrication, no matter what its form. Friction losses from poor lubrication amount to large figures in any plant, no matter what its size. Naturally the more shafting and machines involved, the larger the loss.

Sizable savings in time and money can be accomplished in practically any plant and with less labor than at present used. Our purpose is a double one. We want to see hot bearings eliminated. Secondly, we want to see the plant owner and operator save money he is now spending needlessly.

Proper lubrication in a mill or elevator is particularly necessary due to quantities of floating dust, often of an abrasive nature, which is present. Dust, becoming oil soaked, gradually builds up on the outside of the bearing unless carefully wiped off at very frequent intervals. Badly incrustated bearings are more likely to heat and much more likely to take fire. Many oilers have little conception of their job other than the emptying of some oil either into or onto the

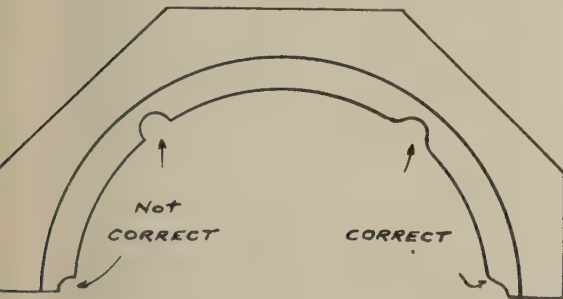


Fig. 1. This shows the correct manner of rounding the edges of chamfers and grooves

bearings. That procedure helps dirty the outside of the bearing, doesn't help the inside much, and wastes a great deal of oil, which costs good money. Large savings in power and in oil can be effected by application of modern lubrication principles.

The one and only purpose of any lubricant is to maintain a film of a low friction substance between the bearing itself and the shaft. It is not true that the shaft runs on the bearing. If it did, neither the bearing nor the shaft would last any time at all. The lubricant completely fills the space between the shaft and bearing walls, allowing no physical contact. It follows then that a good lubricant must have body which will stand up under great pressures and considerable temperature.

Just because one oil costs half as much per gallon as another oil doesn't make it economical. Any driver of an automobile can pay fifteen cents or thirty-five cents for a quart of oil. The latter is the more economical. Greases containing "filler," perhaps wax, soap or resin, can naturally be sold for less money, but you lose

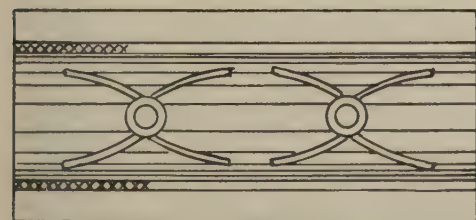


Fig. 2. Shows proper grooving of top half of plain bearings

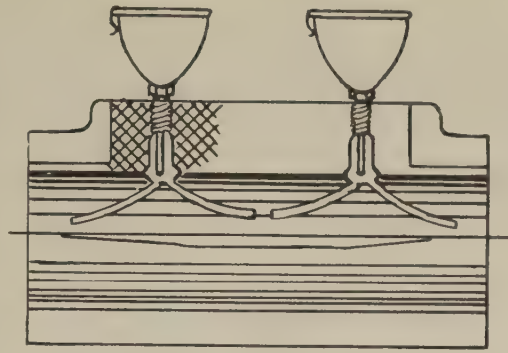


Fig. 4. A plain bearing having original grease pocket filled with babbitt metal and fitted with cups or bottle oilers. Babbitt is represented by cross hatch lines

by buying them. Determine the best oil or grease for yourself and use it, regardless of price. It will save you money.

**Methods of Lubrication:** Plain oiling or hand oiling is as out of date as a 10-year-old automobile. Comparatively it is inefficient and costly. There are methods a great deal better, much cheaper, and infinitely more satisfactory. We must differentiate between oil and grease because different methods of application must be used for each. The first consideration, no matter whether oil or grease is used, must be the proper grooving of the bearings.

**Oil Grooves:** Oil grooves are cut into the surface metal of bearings to improve the distribution and efficiency of the lubricant. It has been the general custom in the past to cut oil grooves in both the top and bottom sections of bearings, but experience has indicated that as good results can be obtained by cutting the grooves in the upper half only. Some authorities say even better results can be obtained in this way. Oil grooves should be parallel to the axis of the revolving part. A groove has three purposes: 1. To hold the lubricant in the bearing; 2. To distribute the lubricant in a lateral direction over the bearing surface, and 3. To return the lubricant, which works over to the edge of the bearing, toward the center. One thing in particular about grooves is that their edges should not be sharp, but well rounded. A sharp edge acts as a wiper, which is not desirable. Rounded edges assist in the flow of the lubricant between the bearing surface and the journal.

This matter of oil grooves, while seemingly a trivial thing, has a great deal to do with efficient lubrication. Many times bearings, which tend to run warm or hot, do so because of faulty or clogged grooves. Liberal allowance should be made in both depth and width of grooves. As good a rule as any for width and depth is as follows:

For width of groove, multiply the diameter of the shaft in the nearest inches by .01 and add .1 inch.

For depth of groove, use one-half of the width as obtained above.

Example: Grooves for a 1½ inch shaft bearing would be 2 inches multiplied by .01 plus .1, which equals 12/100 inches wide or approximately ¼ inch. Depth should be one-half that figure, or 1/16 inch.

Illustrations of correct and incorrect grooving are shown in figures 1, 2 and 3.

Figures 4 and 5 illustrate methods of fitting cups or bottle oilers to bearings. They also show grooves and chamfers.

Processing tax refunds must be listed as net income by processors receiving them, according to a ruling by the Internal Revenue Department.

India's cotton crop has increased 21 per cent over the 1934 crop to 4,752,000 bales of 478 lbs. each, this 1935-36 season, as reported by Commissioner Norris of Bombay. Reduction of our cotton acreage by the AAA has stimulated production in all other cotton growing countries.

## Cotton Seed Delinting by Acid

Nearly six hundred tons of cotton seed were delinted and sterilized with concentrated sulphuric acid in plants operated commercially in Arizona, Mississippi, Tennessee and Texas during the 1935 season. This quantity represents a substantial increase over the amount of seed treated in any previous year. The interest now being shown in new installations of equipment gives reason to expect a further expansion of the practice in 1936.

An extensive survey to determine why a method with such proven advantages has not come into more general use disclosed that one factor has been largely responsible. Cotton growers generally will not go to the trouble of stirring the acid and seed by hand, tho detailed description of the simple technique required has been widely circulated by agricultural experiment stations. Experience has shown, however, that in sections where mechanical equipment has been supplied the practice has spread rapidly, with profitable results and the creation of a new line of business.

A continuous-process delinting, sterilizing and drying unit has been developed by the Chemical Seed Treating and Delinting Corporation, Tucson, Ariz., and efforts are being made to encourage the establishment of plants at local centers.

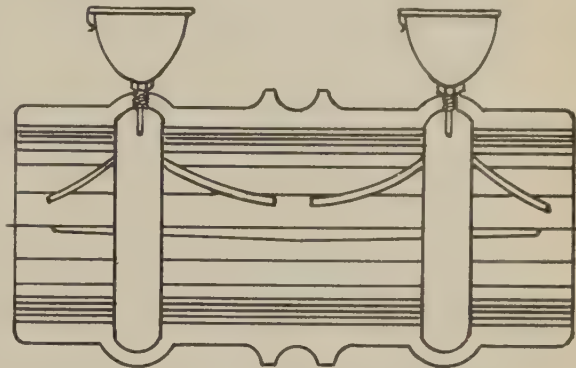


Fig. 5. A ring oiling with rings removed and cups or bottle oilers installed. Note the chamfer Fig. 3. Showing proper grooving of top half of ring oiled bearing

**Capital Stock** of the Commodity Credit Corporation would be increased from \$3,000,000 to \$100,000,000 under a bill introduced by Senator Fletcher.

**To raise the price of cotton** by acreage reduction would require elimination of the annual exports averaging 8,579,000 bales. To recoup the \$514,740,000 received for exports would require the addition of \$84 per bale to the price of \$60 per bale on domestic consumed cotton, raising the price to the domestic consumer from 12 cents to 28 cents per pound.

**Washington, D. C.**—The percentage of corn receipts grading lower than No. 3 was abnormally high during the period Jan. 16 to 31, 'caused by the high moisture content of the new corn marketings. Receipts at representative markets indicate no No. 1 corn, 1% No. 2, 4% No. 3, 22% No. 4, 55% No. 5, and 18% sample.—Buro of Agricultural Economics.

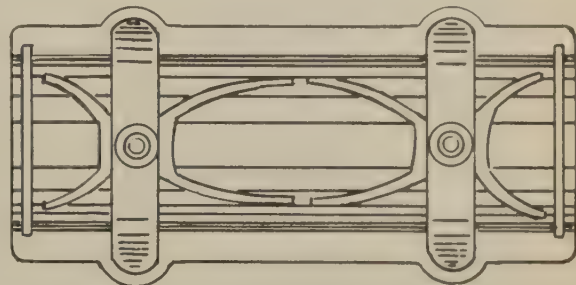


Fig. 3. Showing proper grooving of top half of ring oiled bearing.



## Confiscation of Wheat in France

Among the numerous provisions of the wheat law enacted in France Nov. 7, 1935, is one providing that a decree may be passed before Sept. 30 of the year involved to fix the amount of surplus to be eliminated from the market in the form of wheat or flour by exportation, denaturing, or the setting up of reserve stocks. Under this section of the new decree-law, the wheat and flour to be eliminated shall be obligatorily removed at the mill without payment. In other words, whenever it is agreed that there exists a wheat surplus in the country, the Government will allocate, by decree, the quantities to be eliminated from the market in the various producing sections. Such quantities will be taken over by specified mills and kept at the disposal of the Government.

This surplus wheat is to be given up by the producer, without compensation. Once stored at the mills it becomes the property of the Government, to be disposed of at its discretion thru denaturing, exportation, or the setting up of further security stocks.

The new legislation regarding the control of mills consists of two principal phases, limitation of total grindings and prevention of increase in mill capacity. In the case of limitation of total grindings, the new law stipulates that "in no case may the actual grinding of each mill amount to more than the maximum declared by it during one of the years 1932, 1934, or 1935."

The law stipulates that new mills under construction shall have their grinding capacity fixed by the Secretary of Agriculture. Mills closed since Jan. 1, 1930, may be reopened only if their machinery has not been dismantled. Another stipulation is that from Nov. 1, 1935, the building of new mills is prohibited as is also the reopening of mills closed before Jan. 1, 1930. A further provision stipulates that an increase in the grinding capacity of active mills is prohibited, either by raising the output of present ma-

chinery or by combining several concerns. Should the needs of national defense so require, however, these provisions may be altered by decree.

This decree-law of Oct. 30, 1935, was issued under the exceptional powers granted the French Government for the defense of the franc and must be submitted to Parliament for ratification. Moreover, while the law has been issued already, it is possible that it may not be fully complemented by the necessary decrees and administrative orders.

## Grain Regulating Board of Argentina

Since Nov. 28, 1933, Argentina has had a grain regulating board and an exchange control board. At present the former is empowered to buy wheat at ten pesos per 100 kilos, port of Buenos Aires. This is equivalent to 90 cents a bushel our currency. Last year the fixed minimum was the equivalent of 51 cents a bushel. Minimum price for linseed is 14 pesos per 100 kilos, approximately \$1.16 $\frac{3}{4}$  per bushel, our currency. Minimum for corn is 4.40 pesos per 100 kilos, equal to 36 $\frac{7}{8}$  American cents per bushel at the rate of 32 $\frac{7}{8}$  American cents to the Argentine paper peso.

The government buys pesos from importers at approximately 18 to the pound, sterling, and sells to exporters at 15 to the pound. The profit of three pesos on the pound has not only paid for moderate losses sustained by the government in its purchases of grains but has built up a reserve which, by now, must be close to fifty millions of dollars.

The grain board is prepared to buy any of these three grains at the minimum price at any time for resale to exporters at a price which will permit the grain to be sold abroad. So long as the domestic value is over the fixed minimum, the grain board remains inactive.—Allen P. Allensworth.

Argentina's corn acreage this season is an all-time high of 18,854,000, as reported by Attache Nyhus at Buenos Aires.

## Preserving Grain in Storage

Jesse H. Davis has been granted letters patent, No. 2,027,268, on a means of preserving grain in bins of elevators.

Instead of running the heating grain out of the bin and back into bin his invention leaves the grain in the bin and subjects the particular level in a bin to such local treatment by cold dry air or gas as its condition may require, thus saving power and avoiding attrition of the kernels and consequent degradation.

In the engravings herewith Fig. 1 shows the general arrangement. Fig. 2 a sectional view thru the multiple pipe system. Fig. 3 is a vertical sectional view thru the bottom support.

Hot spots in the bin are located by means of electric thermometers such as the familiar Zeleny System. The air compressing, cooling and drying apparatus, 43, 44, 47, 49, 54, supplies the cold, dry air that is piped to the top of the bin and down a central standpipe having outlets, 15, at various levels. Fig. 2 shows how the flow of air or gas is diverted to any desired set of outlets.

The suction or exhaust part consists of the vacuum pump, 63, dust collector, 66, and a pipe from top of bin. An air conditioner such as that employed in railway cars, 80, 79, supplies air of controlled humidity and temperature to the bin thru the chute, 74.

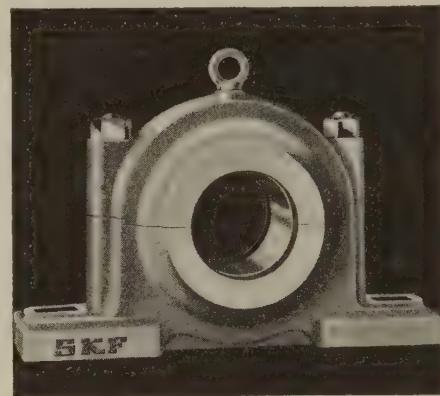
The central standpipe may consist of a 2-pipe system or a multiple pipe system.

Thru valves at top of bin proximate, carbon dioxide or other suitable chemical cooling agent may be introduced for injection with the air to destroy insect life or chemically treat the grain.

## A New SA Type Pillow Block

The improved Roller Bearing Pillow Block, Type SA, is used in conjunction with the SKF Spherical roller bearing. This unit is available for heavy and extra heavy duty and has the following advantages:

The Skf Spherical Roller Bearing which is used with the SA Type Pillow Block is compact and allows the greatest number, length and diameter of rollers, thus giving more capacity for a given space.



Spherical Roller Bearing Pillow Block

The SA Type Pillow Block with the Skf spherical bearing is the only unit having the inherent ability of rolling self-alignment and there is no possibility of imposing extraneous loads, due to setup inaccuracies or deflections of shaft. The full capacity of the unit is always available for useful work.

The split construction of the SA Type Pillow Block provides for the least possible number of parts.

It is designed with cross and transverse ribbing, which assures maximum strength and minimum weight. This ribbing has the additional advantage of minimizing any possibility of warping. The step joints insure at all times absolute location of the upper and lower halves of the housing.

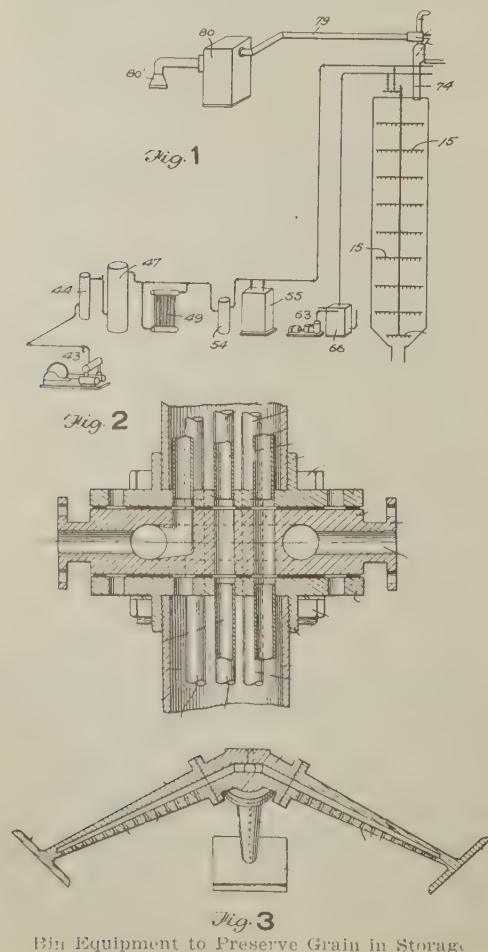
To seal the bearings against intrusion of dirt, large felt sealing rings are used. The housing is designed essentially for grease, which acts as an additional seal for the bearings. Where the dirt conditions are extremely severe the pillow blocks may be changed to accommodate flingers.

The split pillow block facilitates ease of installation and inspection. The lower half is set in place and bolted down, the bearing mounted on the shaft and properly located. The upper half is then bolted in place, a simple mounting procedure eliminating special tools or fixtures. For lubrication, its design is such as to permit introduction of new lubricant with a minimum of time and effort.

## Discrimination Law in Court

The U. S. Circuit court, composed of three judges, Seth Thomas, Thomas C. Munger and Chas. A. Dewey, issued a temporary injunction Feb. 24 at Sioux Falls, S. D., restraining the state of South Dakota from enforcing the law against discrimination in grain buying, as the result of a suit brought by the Cargill Elevators, Inc., of Minneapolis.

Portland, Ore.—Percentages of smutty wheat out of carlot receipts at major inspection points on the Pacific Coast during January, were as follows: Spokane, 24.8% out of 989 cars received; Portland, 29.6% out of 692; Seattle, 26.5% out of 552; Tacoma, 15.7% out of 516; Los Angeles, 3.9% out of 263; Astoria, 20.7% out of 213; Pendleton, 37.8% out of 198; Ogden, 34.3% out of 184.



Bin Equipment to Preserve Grain in Storage



# Grain and Feed Trade News

Reports of new firms, changes, deaths and failures; new elevators, feed mills, improvements, fires, casualties and accidents are solicited.

## ARIZONA

Pima, Ariz.—A large flour and grist mill, operated by E. D. Haggard, burned early Sunday, Jan. 26; loss partly covered by insurance.

Chandler, Ariz.—A \$2,000 addition to bin storage facilities of the Pecos Valley Alfalfa Milling Co.'s mixing plant have just been completed, doubling the storage capacity. New feeding pens also have been added. Two shifts of men are at work handling the alfalfa harvest.

## CALIFORNIA

Fresno, Cal.—The abandoned elevator formerly occupied by the Sperry Flour Co. burned on Feb. 7 at about 4 a. m.; loss, estimated at over \$5,000. It was reported that tramps had been seen about the premises before the fire.

Los Angeles, Cal.—The California Hay, Grain & Feed Dealers Ass'n will hold its twelfth annual convention in this city at the Biltmore Hotel, on Apr. 23-25. Harry N. Laino, of this city, has been appointed general convention chairman.

Napa, Cal.—Repairs to the Napa Milling & Warehouse Co.'s plant, started in December, replacing the fire loss of last November, are about completed. A large warehouse for baled hay will be erected as soon as the winter rains are over.

## CANADA

Halifax, N. S.—Ralph W. Hendry has been appointed port manager here, succeeding F. C. Cornell.

## COLORADO

Holyoke, Colo.—Harvey Tomlin was appointed temporary manager of the elevator of the Holyoke Farmers Co-op. Elvtr. Co. late in January, following the dismissal of Wilmer Trego, manager for the past several years.

## ILLINOIS

Seymour, Ill.—H. A. Beasley has been appointed manager of an elevator at this point.

Decatur, Ill.—The A. E. Staley Mfg. Co. has sold a new issue of \$4,000,000 first mortgage bonds at a premium.

Yorkville, Ill.—Philip Henker, one of the organizers of the Farmers Elvtr. Co. and one of its directors since 1908, died Feb. 9, at the age of 66 years.

Fullersburg (r. d. from Hinsdale), Ill.—The old Graue Mill here will be repaired and will again make flour and cornmeal as it did many years ago. It is a water wheel mill.

Agnew, Ill.—Aug. H. Meins Co. has contracted with Geo. W. Quick & Sons for replacement of its gasoline engine with a 5-h.p. inclosed motor, to be put in the cupola, with a V belt drive to run the leg.

Chadwick, Ill.—Harold Fink has bot an interest in the elevator and coal business of the Chadwick Supply Co. Henry Weber, who has been in partnership with his son, Elmer, is retiring because of ill health.

Peoria, Ill.—The Turner-Hudnut Grain Co. on Feb. 17 closed its 17 elevators temporarily in compliance with an order by Judge Holly, to be re-opened as soon as the financial difficulties of the Rosenbaum Grain Corp. are adjusted.

Goodwine, Ill.—Contract has been let by the Farmers Co-op. Grain Corp. for the construction of an elevator to replace the one that burned early in December, as previously reported. It will be larger than the old one.

Dickerson, Ill.—The power unit of the local elevator of the Fisher Farmers Grain & Coal Co. has been replaced with a 25-h.p., multiple cylinder McCormick-Deering Engine. The driveway was rebuilt and a truck lift installed last summer.

Morris, Ill.—Creditors of Jas. Finnigan, who operated the first barge elevator here until his financial crash last fall, are reported to have arranged for him to reopen the elevator as soon as the river is clear of ice and the barge line is back in operation.

Paris, Ill.—The H. & M. Supply Co. has recently installed a motor-driven Kelly Duplex Corn Cracker and Grader. The machine produces three grades of cut corn, removes the meal and aspirates the corn. The products are sacked direct from the machine.

Decatur, Ill.—Officials of the Hight Elvtr. Co. are reported to have been threatened with arrest on city warrants unless steps are taken to control the grain dust and chaff, against which residents in the neighborhood of the elevator had complained to city health officials.

Saybrook, Ill.—The West Side Elvtr., owned by the Clyde Brittain Grain Co., burned about 12:30 a. m., Feb. 6, together with about 10,000 bus. of oats and 1,000 bus. of soybeans. The Brittain Grain Co. owns both elevators here and the one that burned was used only in storing grain. No one had been in the building for several weeks, it was said. The property was insured.

Martinton, Ill.—Andrew Buchan, 69 years old, manager of the Martinton Grain Co.'s elevator, was instantly killed and his body torn apart, Feb. 8, when his clothing became caught in machinery at the elevator. He was adjusting a chain drive and apparently had not closed the clutch while he made the adjustment, as the shaft in which his clothing was caught was still running when his body was found.

Mulberry Grove, Ill.—Attempts of a pyromaniac to burn the office of the Mulberry Grove Equity Exchange Elvtr. at 10:30 p. m., Feb. 4, were defeated by a passerby who discovered the fire just as it was getting started and who, with the aid of another man, put it out. An oil-soaked jumper and a quantity of oily waste were found burning at the side of the building, on which oil had also been sprinkled, and a quart bottle was found that had contained oil. The damage to the building was slight. The office building is but 100 feet from the large elevator.

## CHICAGO NOTES

A downtown office for the sales force and soybean division has been opened by Spencer Kellogg & Sons Sales Corp. at 105 West Adams St., with J. E. Johnson in charge of the soybean division.

Fire on the 17th floor of the Board of Trade Bldg., supposedly started from a lighted cigarette stub thrown carelessly into a wastebasket, damaged the offices of Hatley Bros. on Feb. 20, to the extent of about \$50.

The following were recently elected to the board of managers of the Ass'n of Grain Commission Merchants of the Board of Trade: James E. Bennett (one-year term), A. W. Mansfield, E. L. Hicks, Jr., and M. R. Glaser (for three-year terms). Officers of the ass'n have been selected as follows: Pres., James E. Bennett; vice-pres., H. B. Godfrey; sec'y-treas., E. A. Boerner.

Operation of elevators of the Chicago Elvtr. Properties, Inc., has been discontinued by order of Judge Holly. The order affected the Irondale and the Rosenbaum "A" and "B," of the Rosenbaum Grain Corp. and was issued to cut expenses. The trustees are permitted to use part of a \$379,000 cash fund for watch service and insurance. Judge Holly has approved a compromise of claims of the Rosenbaum Corp. against B. F. Goldstein, who turns over \$15,000 cash and reduces his counterclaims from \$129,195 to \$49,700.

A brief has been filed with Federal Judge Wilkerson asking for dismissal of the \$1,000,000 damage suit of the Estate of E. W. Backus, former Minneapolis grain speculator, against Gustavus F. Swift, Jr., Herbert J. Blum and Allen W. Moore, Chicago grain dealers. The suit has been pending for more than two years. The bill of complaint alleged that the defendants conspired to corner the corn market in 1928, forcing the price up more than 10 cents a bushel. Backus was unable to make delivery of 950,000 bus. of corn on July 31, 1928, and was later forced to settle and pay a penalty.

## INDIANA

Hartford City, Ind.—The Knecht Milling Co. has installed a Blue Streak Corn Cutter.

Gas City, Ind.—L. F. Rahrar & Son have bot the Miller & Thomas Feed Mill at this point.

Claypool, Ind.—The grain elevator here recently purchased by the Wakarusa Milling Co., has been remodeled.

Indianapolis, Ind.—The three-story brick feed plant of E. Rauh & Sons Fertilizer Co. burned Feb. 15; loss, \$150,000.

Van Buren, Ind.—Frank Hershberger is installing a new Kelly Duplex Cutter Head to improve the quality of his cracked corn.

Lawrence, Ind.—A building to house his feed grinding and mixing equipment is being erected by Everett Butler, owner of the Consumers Feed Store here.

Marshall, Ind.—The Marshall Feed & Grain Co. has recently installed a new Kelly Duplex Corn Cutter and Grader. The machine is motor driven and produces three grades. The products are sacked direct from the machine.

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Ventilating Grain Elevator Legs and Grain Storage Bins**

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BUILDING PRODUCTS BUILDING PRODUCTS  
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District offices in Chicago, St. Louis, Minneapolis and other large Cities  
ROBERTSON PROTECTED METAL ROOFING AND SIDING IS STRONG AND CORROSION-PROOF



Swayzee, Ind.—The Swayzee Grain Co. recently purchased the old Zirkle livery barn building and is stocking it with a complete line of farming implements. The company will also carry a stock of feeds in this up-town location. Walter D. Lavengood will continue to manage the entire business, including the elevator and the new implement store.

## FOSTER-KENDALL CO.

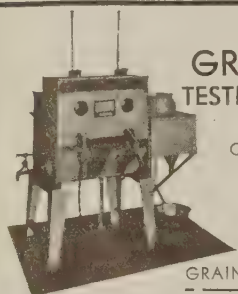
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Minneapolis, Minn.

Greenfield, Ind.—The Virginia Sweet Co., manufacturer of buckwheat flour, pancake and waffle flour, etc., is moving its plant from Indianapolis to this city.

Fulton, Ind.—The Mayer Grain Co., Frank Vickery manager, sponsored a talking motion picture entitled "Hidden Harvest," which was presented in the high school auditorium the evening of Feb. 21. The picture was educational as well as entertaining and was presented in the interest of better farming. It was free to the public.

Indianapolis, Ind.—The trucking law governing the gross weight tax, originally calling for a tax of \$1 per cwt. of the fully equipped truck, in 1935 was reduced to 60 cents per cwt. It is in effect and was collected during 1935 and so far this year. It applies largely to the contract and common carriers. Privately owned trucks are exempt.

Dunn (Ambia p. o.), Ind.—Fire was discovered at the plant of the Dunnington Grain Co., operated by W. F. Starz and F. P. Grau, on Feb. 7 at 3:00 p. m. While removing dust from dust house, men discovered a pocket of heating dust. In order to expedite removal of dust door was enlarged and more air admitted with the result that the hot spot burst into flames. In order to get fire under control help was called and the plant saved. Spontaneous combustion in damp dust is not new in dust houses or dirty elevators.

Logansport, Ind.—For the 21st annual meeting of the Farmers Grain Dealers Ass'n of Indiana held here in the City Building with headquarters in the New Barnes Hotel there was scheduled an address by W. A. Gray, of Kirkpatrick, on "Legal Aspects and Difficulties"; John Witte, of Hoagland, on "Keeping Labor Costs Down"; Nat C. Murray, of Chicago, on "Effect on our Markets of Importing and Exporting Grain"; Wm. Hagen, of Chalmers, on "Federal Income Tax"; H. S. Irwin, of Chicago, on "Hedging for the Country Elevator," and Prof. A. F. Hinrichs, of Purdue, on "Assistance by the University to the Country Elevator." On the evening of the first day, Feb. 26, a banquet will be given, and adjournment will be had the afternoon of Feb. 27.

Portland, Ind.—To replace grain elevator recently destroyed by fire, contract for new building, which is to be of re-inforced concrete having a capacity of 17,000 bus., has been let to the Indiana Engineering & Const. Co. Complete new modern equipment will be furnished by the Sidney Grain Mch. Co. All machines and elevators will be operated by separate reduction geared motors, requiring seven of this type motors for various machines and other equipment. Electric truck dump, 4-bu. Richardson Automatic Weigher, Reeves Variable Speed Drives for operating drag feeders, steel elevator boots, heads and legging will be installed. All bearings will be roller or ball bearing type. Electric manlift, eccentricless cleaners, all steel spouting, steel aerator.—The Haynes Milling Co., E. M. Haynes, pres.

Lafayette, Ind.—Grain dealers are urged to attend the grain grading school during the third week of March and to inform Fred Sale, sec'y of the Indiana Grain Dealers Ass'n, of their intention to do so, so that he may assure the university of the attendance of at least 40 at the two-day session. On the first day, the morning session will consist of the registration of those attending and an opening meeting to follow until lunch time. During the afternoon, the meeting will be devoted entirely to the analysis and grading of corn. This will consist of determining the test weight, picking out damaged kernels in a sample, comparison of tests made both on the Brown-Duval machine as compared with the tests made on the Tag-Heppenstall electric meter, etc. The morning of the second day will be devoted to the commercial grading of wheat and oats. The afternoon will be devoted to the grading and analysis of samples of soybeans. Dealers attending will be able to recognize "sick" wheat and damaged corn, as well as to learn the proper use of the grain sieves and the moisture testers. The dates selected are Mar. 18 and 19. This will be the first school of the kind where the grain men of the state will have an opportunity to study the technique of commercial soybean grading. F. E. Robbins, associate professor of crop production, who is also a licensed inspector, will have charge of the school, and be assisted by W. B. Combs, from the Chicago headquarters of the Federal Grain Supervision.

## IOWA

Cylinder, Ia.—Thieves entered the Farmers Elvtr. Co.'s office here recently and took \$20.—A. G. T.

Coulter, Ia.—The Coulter Farmers Elvtr. Co. is planning to organize a co-operative elevator company.

Waterloo, Ia.—Western Soybean Mills, incorporated; capital stock, \$100,000; incorporators: C. W. Ruth, R. R. Drake and others.

Marshalltown, Ia.—Offices have been opened in the Kresge Bldg. by the Central Distributing Co., Inc., a new feed jobbing concern, with A. A. Ames as manager.

Keokuk, Ia.—The Purity Oats Co. has reopened its plant, resulting in the heads of 153 families being taken from the relief rolls and given jobs in the plant.

Grand Mound, Ia.—F. Mueller & Sons Co. has installed a Kelly Duplex Corn Cutter and Grader. The machine has a capacity of upwards of a ton per hour, and is motor driven.

Woolstock, Ia.—Ed. Olson, manager of the Farmers Elvtr. Co.'s elevator here, had the misfortune of breaking his leg recently when he slipped and fell on the icy streets. At last reports he was coming along in good shape.—Art Torkelson.

Waterloo, Ia.—The Soybean Processing Co., incorporated; incorporators: R. A. Rath, W. H. Langlas, C. E. Butler, C. F. Alstadt, W. E. Ogle, J. W. Coverdale and Howard L. Roach. Operations will be started soon. The company will probably occupy one of the Galloway Co.'s buildings.

Des Moines, Ia.—W. I. E. I. and A. E. Sargent, owners and managers of the feed firm of Sargent & Co., have formed and incorporated the Sargent Investment Co., as a holding company for the interests of the three brothers, with a capital stock of \$50,000. The Sargents also own the Sargent Bros. Contracting Co.

Malcolm, Ia.—While backing his truck up to a carload of coal on the track, Otis Wood, a farmer near here, was critically injured when a fast train struck his truck, throwing him thru the windshield. Charles Huff, an employee of the Farmers Elvtr Co., who was helping him get the coal, jumped from the truck just before the train struck it.—Art Torkelson.

Dumont, Ia.—J. A. Thompson, 63 years of age, manager of the Farmers Grain Co.'s elevator for 15 years, died suddenly Feb. 3. He had gone home for his evening meal when he remarked he did not feel very well, sat in a chair and passed away very shortly. J. R. Britcher, who has been second man for some time, is temporary manager.—Art Torkelson.

Oxford, Ia.—L. W. Gifford, owner and manager of the Gifford Grain Co.'s elevator, had two fingers on his left hand broken and one crushed recently, when they were caught in a belt at the elevator. Mr. Gifford's sleeve caught in a belt on which he was trying to put some belt dressing. Fortunately, some one was near by and pulled the switch, shutting off the power, which no doubt prevented a more serious accident.

Independence, Ia.—Edward A. Jamason, 49, who has been in the country grain and coal business for 16 years, principally at Independence, succumbed, after five weeks of illness, to heart disease and passed away on Feb. 9. His wife and two sons survive. Mr. Jamason had suffered from heart disease for a number of years, and was forced to temper his physical activities with rest. For this reason the former smoking room of the chair-car office he had transformed into a private rest room, with a chair, a cot, and a hot air duct from the furnace in the basement. Under doctor's orders he spent a part of each day here, and allowed nothing to interfere with his rest period.—Art Torkelson.

## KANSAS

Newton, Kan.—The Goerz Flour Mills have installed a new 700-h.p. motor.

Frederick, Kan.—The H. D. Lee Flour Mills Co. sustained wind damage on Feb. 7.

Lehigh, Kan.—The Friesen Grain Co. has just completed a new ironclad warehouse building.

Lorraine, Kan.—The Lorraine Grain, Fuel & Stock Co. sustained damage to its electrical equipment on Jan. 28.



Dodge City, Kan.—The Kansas Grain Dealers Ass'n will hold its 39th annual meeting in this city on May 26 and 27.

Jetmore, Kan.—C. S. Laird has purchased C. H. Guthrie's interest in the elevator here and is now sole owner of the property.

Albert, Kan.—The Farmers Mill & Elevator Co. has bought the Home Oil Co. here and will operate it in connection with its elevator.

Wichita, Kan.—The mill plant of the Wichita Flour Mills Co. was slightly damaged by fire of undetermined origin on Feb. 1.

Montezuma, Kan.—William Lamberth has been appointed manager of the Security Elevator Co.'s elevator, succeeding H. E. Felible, who has been in charge for several months.

Salina, Kan.—The city commissioners recently decided to request J. J. Vanier, local miller, to take down the frame elevator erected under a permit granted in 1931, the permit to be good for two years only. The structure has already stood beyond the time allowed.

Kinsley, Kan.—The Kinsley Co-op. Elevator Co. has had its elevator wrecked, which had to be taken away from the right-of-way of highway 45 thru town, and has let the contract for a new elevator, the foundation of which has been laid. The new building will be erected as soon as weather permits work. Roy Hatfield has the contract.

Iola, Kan.—D. A. McDonald, Jr., is the new president and manager of the Iola Milling Co., which operates an elevator succeeding C. E. Sawyer, resigned. Mr. Sawyer, who has long been identified with the company, has transferred a portion of his stock to Mr. McDonald and will no longer take any active part in the management of the business.

## KENTUCKY

Henderson, Ky.—A feed mill has been opened on Highway 60 by Edward Utley and G. L. Carter.

Mayfield, Ky.—The electrical equipment of the Mayfield Milling Co. was slightly damaged on Feb. 1.

Sanders, Ky.—The Eagle Valley Mills, now under new management, recently installed a hammer mill. Feed, cornmeal and flour are produced. C. W. Shirley is manager.

Hopkinsville, Ky.—On Feb. 2 at 7 p. m. the night watchman in the plant of the Hopkinsville Milling Co. smelled smoke and discovered fire in the top of the mill. The fire department was called and put it out quickly.

Owensboro, Ky.—The elevator of the Owensboro Grain Co. was damaged by fire, which was discovered at 10:30 p. m., Feb. 12, in the upper part of an elevator shaft; loss, about \$75,000, approximately \$38,000 of which was to the 150,000 bus. of grain in store, and the balance to the machinery; covered by insurance. Repairs were started at once and it was expected to have the plant in operation again within 30 days.

## MICHIGAN

Portland, Mich.—The Portland Elevator Co. has installed a No. 3 feed mixer.

Charlotte, Mich.—The Farmers Elevator Co. has installed a sheller and a senior corn cracker.

Kalamazoo, Mich.—C. C. Huston has recently installed a corn cracker and grader in his feed mill.

Freeland, Mich.—Charles Wolohan, Inc., sustained windstorm damage to his elevator on Feb. 4.

Bath, Mich.—The Bath Farmers Elevator Co. recently installed a feed mixer and a Jacobson Electro-Magnetic Separator.

Cadmus, Mich.—The Cadmus Farm Bureau has replaced the gasoline engine in its elevator with a 7½-h.p. electric motor.

Midland, Mich.—The Michigan Bean Co. has installed a 99D ball bearing cleaner driven by a 10-h.p. Fairbanks-Morse fully-enclosed motor.

Freeport, Mich.—C. H. Runciman, of Lowell, is now operating the local elevator and feed mill. A feed mixer has recently been installed in this plant.

Detroit, Mich.—The Michigan Feed & Grain Co.'s plant burned at 3:20 a. m., Feb. 18; loss, estimated at \$100,000.—Art Torkelson, with Lamson Bros. & Co.

Leslie, Mich.—A Speed King Corn Crusher has recently been installed in the elevator plant of which I. N. Franz, of Howard City, is the new manager.

Benton Harbor, Mich.—The Great Lakes Fruit Ind., Inc., will be liquidated. Feed mills in Shelby, Eau Claire and Benton Center will be turned back to local ass'ns.

Merrill, Mich.—Chas. Wolohan, Inc., is installing a new Kelly Duplex Ear Corn Crusher & Feed Regulator ahead of its hammer mill, also an electro-magnetic separator.

Trufant, Mich.—The Trufant Farm Bureau has installed a rebuilt 18-inch feed mill with a built-in electro-magnetic separator and a built-in pneumatic feed collecting system.

Cadillac, Mich.—The elevator being constructed by the Michigan Elevator Exchange is practically completed. A recent addition to the equipment was a 1-ton Duplex Mixer driven by a 5-h.p. motor.

Melvin, Mich.—The Kerr Grain & Hay Co. has installed two fully-enclosed electric motors for operating a new grain elevator leg and the bean pickers. Ten hand pickers have been added to the bean picking room.

Petoskey, Mich.—Michigan Potato Growers Exchange (operator of a grain elevator) has recently installed a Kelly Duplex Vertical Feed Mixer. The machine has floor level feed, is motor driven, and has a capacity of one ton.

New Troy, Mich.—The New Troy Mills, operated by Dean and Floyd H. Morley, have replaced their small engine, used in connection with the waterpower, with a 75-h.p. diesel type engine. A large air compressor is being added also.

Maple Rapids, Mich.—After a shutdown of several months, the Maple Rapids Mill opened again Feb. 17 under the management of a new firm, Hyde & Van Sickle. Jerry Hyde was the 'junior member of the firm Hyde & Son, which operated the mill for some months, later closing it. A. J. Van Sickle is the new member of the firm. The mill will manufacture different kinds of flour and other wheat products.

Clinton, Mich.—The Atlas Milling Co. has erected a steel drier building adjacent to its flour mill and installed a Randolph Oil Burning Grain Drier. It has also added another stand of elevators in the mill to take care of this drier, these legs being driven by a 1½-h.p. fully-enclosed, self-ventilated motor. An electric instantaneous reading moisture tester was installed for use with the drier. Other recent improvements consist of anti-friction bearings for the main line shaft and for all the water wheels. H. P. Hoyt, proprietor, states that this installation saves about 10% in power.

Montgomery, Mich.—Tri-State Co-op. Ass'n has started the reconstruction of its feed mill which was totally destroyed by fire on Dec. 30. This will be erected in a different location adjacent to its creamery. Equipment will consist of a No. 20 Blue Streak Hammer Mill, a No. 3 feed mixer, and a Sidney Sheller. All of the electric motors used to drive these machines will be of the fully-enclosed type. Two special elevator head drives will be used on the two main elevator legs.

Pinckney, Mich.—Read Bros. elevator that burned early this month, as reported in the Journals last number, contained 500 bags of beans, 500 bus. of rye and wheat (mostly rye), bran, stock feed, etc., also grain machinery, large motor and hoisting apparatus. The bean picking machinery was in another building and was saved, as were also the coal, cement, etc. When the safe was dragged out of the fire, the books and accounts in it were found to be uninjured. The loss was partly covered by insurance.

South Rockwood, Mich.—The John Strong Estate's feed and flour mill, operated under lease by L. A. Harrington & Sons, together with all contents burned Feb. 7, while the employees were at home for the evening meal. The fire possibly originated in a cob pile. Loss to building and equipment, \$75,000; to contents, including 8,000 bus. of wheat, 200 barrels of flour, 50 tons of mixed feed and large quantities of other grains and supplies (owned by the Harringtons), \$25,000; both building and contents covered by insurance.

## MINNESOTA

St. Cloud, Minn.—Fred Stark has become associated with J. C. Mohr in the Granite City Flour & Feed Co.

Ottertail, Minn.—The stockholders of the Farmers Equity Elevator Co. recently voted to renew the charter of the company.

Minneapolis, Minn.—William R. MacRae, 30 years of age, a grain buyer for the Pillsbury Flour Mills, died at Abbott Hospital on Feb. 14.

Collis, Minn.—The Miller Elevator Co. will rebuild its burned 50,000-bu. elevator in the spring. The building and contents were covered by insurance.

Hallock, Minn.—J. O. Carlson has resigned as manager of the Hallock Grain & Supply Co. and has been succeeded by Joseph Birkland, of New England, N. D.

Duluth, Minn.—The amendment to the Board of Trade rules, establishing a minimum charge of \$12 per car for grain or seeds, was voted on Feb. 20 and passed unanimously.—F.G.C.

# STRATTON GRAIN CO.

## GRAIN and FEED MILWAUKEE, WIS.

CHICAGO, ILL. ST. JOSEPH, MO. NEW YORK, N. Y.

### Operating Elevators at

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Depot Harbor, Ont.

Chicago, Ill.

Schneider, Ind.

St. Joseph, Mo.

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TOTAL STORAGE CAPACITY 10,000,000 BUSHELS

BUYERS AND SELLERS OF GRAIN  
SPOT & "TO ARRIVE", CONSIGNMENTS

MILL FEEDS—FEED PRODUCTS—BY-PRODUCTS

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New Prague, Minn.—The International Milling Co. sustained sprinkler leakage damage on Feb. 7.

Olivia, Minn.—Magnetic separators have been installed in the feed mills of the DeWerd Milling Co. at this point, at Danube, Morton, Cottonwood and Clara City, all in this state.

Duluth, Minn.—The continued cold weather has created heavy ice conditions in the Duluth-Superior harbor and also Lake Superior. Ice in the harbor is reported 31 inches deep.—F.G.C.

Herman, Minn.—An interest in the Herman Mills has been bot by R. Rasholt, who is overhauling the plant. In addition to handling grain and seed, he will specialize in manufacturing prepared feeds.

Preston, Minn.—The Spies Milling Co. will erect a warehouse, 54x24 feet, two stories high, with a capacity for 10,000 bus. of grain on the second floor. The first floor will be used for warehouse purposes.

Garvin, Minn.—The Monarch Elvtr. Co. has appointed Ernest Colburn, of Slayton, manager of its local elevator, succeeding Lloyd Madison, who resigned recently and has taken a position with the International Harvester Co.

Klossner, Minn.—On Feb. 11 the Eagle Roller Mill Co. sustained slight damage to its property from a fire which started between the ceiling and the roof of the office. It was noticed immediately and put out without doing much damage.

Shakopee, Minn.—The new malt plant to be erected here for Cepro, Inc., of Manitowoc, Wis., a division of the Rahr Malting Co., will include germinating vats and kilns, malt cleaning and shipping house, a 500,000-bu. elevator and workhouse with two sets of storage tanks. A 600-h.p. boiler plant, a separate machine shop, welfare building, office building, oil storage house, two 1,000-gallon wells, on six acres of land and served by three tracks, all to be of re-inforced concrete, will be engineered and constructed by the McKenzie-Hague Co. Work will commence when the weather permits. The project is scheduled for completion by July 1.

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and a complete line of grain and seed testing equipment. Every item guaranteed up to government specifications.

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## MICHIGAN

POULTRY WHEAT

RED, WHITE AND MIXED  
MILLING WHEAT

ROSEN RYE

MALTING BARLEY

NATURAL PLUMP OATS

BUCKWHEAT

Ask for Samples and delivered prices

LANSING GRAIN CO., Lansing, Mich.

Duluth, Minn.—Nathan C. Clark died at Hollywood, Cal., Feb. 12, at the age of 73, after being in ill health for some time. Mr. Clark was associated with the Cargill interests for 40 years, retiring in 1932, and was a member of the Duluth Board of Trade from 1895 to 1932. Burial was at Minneapolis.—F.G.C.

Moorhead, Minn.—The corn cleaning and drying unit owned by the Moorhead Farmers Elvtr. Co., that is being rebuilt by the T. E. Ibberson Co., following the recent fire, will be a complete corn drying unit, along with a grading and cleaning unit, preparing corn for seed, and there will be necessary storage. Max Goldberg is the general manager.

## MISSOURI

Ozark, Mo.—The mill plant and stock of the Hawkins Bros. Milling Co. were damaged by fire of undetermined origin on Feb. 8.

Farmington, Mo.—The Giessing Milling Co., feed and flour manufacturers, has resumed operation again after being shut down since last October to permit remodeling and installation of new and up-to-date equipment. Twenty men are employed at the plant.

Frankford, Mo.—J. Frank Wilson, of Palmyra, has been appointed manager of the Farmers Elvtr. Co.'s elevator here, succeeding V. V. Garner, manager for the last five years, who resigned. Mr. Wilson served as postmaster during the Coolidge and Hoover administrations.

### KANSAS CITY LETTER

While on her way home with several other employees of the Board of Trade, on Feb. 14, Edna Campbell, sec'y to Frank Stoll, publicity director of the Board of Trade, was killed in an auto accident. Internal injuries and fractures were suffered by two young men in the car.

Kansas City, Kan.—Court action to prevent construction of the proposed 1,500,000-bu. elevator here on the public levee has been started by Fred Robertson, of this city, and the Wyandotte Loan & Investment Co., of which he is president. Thru the action it is sought to enjoin the issuance of \$300,000 in general obligation bonds by the city.

Joseph B. Bracken, retired member of the Board of Trade, died at his home in Hickman Mills, Mo., on Feb. 10, at the age of 73. Mr. Bracken retired in 1929, after 35 years activity in the grain business, during which time he was the representative of private wire concerns, including Lamson Bros. & Co., Jackson Bros. & Co. and Ware & Leland. His widow, a son and a daughter survive.

We are indebted to Sec'y W. R. Scott of the Kansas City Board of Trade for the annual statistical report of that body for 1935. In addition to the officers, directors, com'ites and members of the board, the book contains the usual information of interest to grain men, such as the daily range of prices of different grains for the entire year, receipts of grain for each of the past 36 years, by years, a list of the grain elevators in Kansas City with capacities and operators, wheat and corn crops of the United States, by states and years, wheat crops of the world, etc.

## MONTANA

Plains, Mont.—The local flour mill recently installed two new pieces of machinery.

Antelope, Mont.—The Sheridan Milling Co. has purchased new equipment that will increase its output about 30%. The company was recently incorporated.

## NEBRASKA

Crete, Neb.—The Crete Mills sustained damage to their electrical equipment recently.

Elgin, Neb.—The Elgin Lumber Co. installed a Bender Truck Dump in its elevator recently.

Elgin, Neb.—Farmers Co-op. Exchange has added a Bender Truck Dump to its elevator equipment.

Pilger, Neb.—Cooper & Chace, who last fall purchased the local elevator of the Nye & Jenks Grain Co., held their public opening on Feb. 6.

Omaha, Neb.—Frohart Hay Co., incorporated; capital stock, \$5,000; incorporators: Louis G. and Viola F. Frohart.

McCook, Neb.—Emmet Sallee has resigned as manager of the Farmers National Grain Corp.'s local office and has been succeeded by Harry Cummins.

Holdrege, Neb. — Offices of the Scoular-Bishop Grain Co. have been moved from the First National Bldg. to the second floor of the Schrock Bldg.

Palmyra, Neb.—The 25-year charter of the Farmers Elvtr Co. has nearly expired and the company has decided to re-incorporate but on a co-operative basis.

Wilber, Neb.—On Feb. 11 Zwonechek & Ak-samit sustained damage to their electrical equipment with subsequent electrical breakdown use and occupancy loss.

Arapahoe, Neb.—Farmers Co-op. Grain Ass'n. incorporated; capital stock, \$10,000; incorporators: John F. and Ludwig Esslinger, Joseph Einstein, W. H. McClellan and others.

Beatrice, Neb.—G. W. Rains, formerly of Imperial, has been made manager of the Farmers Co-op. Elvtr. Co.'s elevator, succeeding Robert W. Jark, manager for the past 10 years.

Scribner, Neb.—The Scribner Grain & Lbr. Co. has installed a GE 10-h.p. enclosed geared motor, direct connected to the head, and fitted head and boot pulleys with anti-friction bearings.

Atlanta, Neb.—Ira Rhodes, of Orleans, has purchased an interest in the Snyder Bros.' elevator and will take charge of the plant in the near future. Jasper Case has been in charge of the elevator.

Alexandria, Neb.—William Joe, manager of the Shannon Grain Co.'s elevator, has received instructions to close up the elevator for the next few months, as has been the custom for the past few years at this season of the year.

Lexington, Neb.—Albert Kjar's elevator burned during the night of Feb. 20; loss, about \$9,000; partly insured; some of the 5,000 bus. of grain stored in the elevator may be salvaged. The fire was believed to have started from an electric motor. Mr. Kjar does not intend to rebuild.—Eck Olsen.

Brainard, Neb.—Fire, starting from an overheated stove pipe, damaged the roof of the Farmers Elvtr. Co.'s elevator early in the morning of Feb. 3. Fortunately, Manager Emil Peltz was in the office and discovered the fire before it had done much damage, and succeeded in holding it in check with a small fire extinguisher until the fire department arrived.

Omaha, Neb.—We are compiling a list of fraudulent practices perpetrated by crooked and irresponsible truckers and must suggest measures by which these can be corrected and punished. We ask every grain dealer to write this office a clear account of any authentic misdemeanors or crimes by these fellows so we can prove the need of drastic action by law.—J. N. Campbell, sec'y Nebraska Grain Dealers Ass'n.

Grand Island, Neb.—The Nebraska Consolidated Mills Co. has let the contract for the construction of a 325,000-bu. elevator and head-house, of re-inforced concrete, consisting of 10 tanks, to the Jones-Hettelsater Const. Co., work to start as soon as weather conditions permit and completion to be in time for the new crop. Contract for a new 600-barrel mill has also been let, to consist of five stories and basement and to be air-conditioned thruout. New machinery will be installed thruout the new plant, none of the equipment in the old plant being used in the new. The old mill and elevator will be taken down. Horner & Wyatt designed the new plant and will supervise construction. Completion is to be by July.

## NEW ENGLAND

Boston, Mass.—At the first meeting of the new directors, the exchange re-elected Frank W. Wise, treas., and Louis W. DePass, sec'y, both officials having served the exchange in the same respective capacities since it was organized in 1925. A full attendance featured the meeting of the directors, who elected com'ites. Alex S. MacDonald was elected chairman of the com'ite on grain, together with Edward J. Donahue and George H. Hopkins. The com'ite on hay and straw consists of Edwin L. Smith, chairman, and J. Wesley A. Gordon.—L.V.S.



Boston, Mass.—As the first step in a program to inspire members of the Boston Grain & Flour Exchange with new enthusiasm and to inform them of what other groups are doing to combat the increasing trend of government in business, the new officers announce a series of luncheon-meetings to be held in the library of the Exchange Bldg. A prominent speaker is promised for each meeting, stressing political events of significance to trade. The speaker at the first of the luncheons, is to be R. F. Bowman, traffic manager of Heywood, Wakefield Co., who will talk on "Evils of Government Ownership of Railroads."—L.V.S.

## NEW YORK

New York, N. Y.—New members of the Produce Exchange are Arthur J. Schwartz, Paul W. Bates, Alden S. Blodget and A. Qvistgaard-Peterson, the last named being an associate member.

Rochester, N. Y.—The Moseley & Motley Milling Co., one of Rochester's oldest industries, has passed out of existence with sale of its brands of feeds, flour and goodwill to Federal Mills, of Lockport. Because of Moseley & Motley Co.'s historical value, Harvard University has asked for its records, which are being shipped to it. The firm was established in 1862, but flour mills had occupied the same site continuously since 1829, getting their waterpower from Genesee Falls.

## NORTH DAKOTA

Grand Forks, N. D.—The T. E. Ibberson Co. is installing an improved feed mill, with a magnetic separator and scalper at the feed mill belonging to the State Mill & Elvtr.

Benedict, N. D.—The Farmers Co-op. Elvtr. Co. recently decided to rebuild its elevator destroyed by fire about a year and a half ago. The contract has been let to the Hogenon Const. Co.

Hillsboro, N. D.—William Ferguson, who has been manager of the Monarch Elvtr. Co.'s elevator here since June, 1933, has been promoted to the position of district superintendent of Monarch elevators. He will take over his new duties Mar. 1, making his headquarters at Valley City, N. D.

Turtle Lake, N. D.—The new seed plant and corn drying unit for the Equity Elvtr. & Trading Co., Bob Boehm manager, that the T. E. Ibberson Co. has been constructing (described in detail in the Jan. 22 Journals) has been completed. It is a complete new unit for the processing of seeds, together with a warehouse for the company's products.

Antler, N. D.—The Antler Co-op. Grain Co. will build an elevator to replace the one destroyed by fire in October. A contract has been let to the Van Ness Const. Co. for plans and specifications for a 40,000-bu. cribbed steel-clad house. Equipment will include one leg, Strong Scott Head Drive, 15-ton Fairbanks Truck Scale, 100-bu. hopper scale, a manlift and a Bender Truck Dump.

North Valley City (Valley City p. o.), N. D.—The Occident Elevator Co. will build here on the site of one of the old elevators which was razed last fall, an entirely modern plant equipped to take care of all of the demands of present grain handling. The plant will consist of a main elevator, driveway, office, warehouse with feed mill room built in connection. Main elevator is of cribbed and frame construction, built on reinforced concrete foundation, the outside to be covered with 26 gage galvanized iron siding and standing seam roofing of the same gage. There will be 18 bins, six deep flat bottomed bins, three on each side of the workfloor, six hoppers overhead bins and six hanging bins. Equipment consists of 26 x 9, 20-ton Fairbanks Scale, air lift, and 14 feet of steel grating. There will be two receiving legs, with Strong-Scott Head Drive, a 100 bu. Fairbanks Hopper Scale for weighing out grain, a Carter Combination Disc and Cylinder Separator with texrope drive and 3-h.p. Fairbanks-Morse motor. The feed mill is to be equipped with a Fairbanks-Morse Hammer Mill with 25-h.p. motor, texrope drive, equipped with cyclone and valves for distribution into various bins. The feed mill is placed in basement and so arranged that ear corn can be spouted direct without elevating. The Hogenon Const. Co. has the contract.

## OHIO

Richwood, O.—The elevator and coal yard of the Richwood Implement Co. have been taken over by the Hunt Milling Co.

Gettysburg, O.—The Gettysburg Equity Exchange Co. has installed dump equipment furnished thru the Sidney Grain Mch. Co.

Marion, O.—Betty Zane Corn Products, incorporated; capital stock, 250 shares, no par; incorporators: E. W. and Frank Thompson and A. G. Birch.

Lewisburg, O.—A new hammer mill and diesel engine have been installed in the plant of the Lewisburg Feed & Supply Co., recently bot by William Floyd.

London, O.—F. J. Woods & Sons, elevator operators, have installed a Sidney Combined Sheller & Boot as well as other equipment furnished by the Sidney Grain Mch. Co.

Ney, O.—Charles E. Doud, manager of the Co-op. Grain Co.'s elevator here, was killed, early this month, when his auto collided with another at a highway intersection near Defiance.

Cedarville, O.—The Cedarville Grain Co., which recently took over the Allen elevator, has overhauled it, installed a grain drier and opened it for business, with H. F. Hupman as manager. A general grain, feed and seed business will be done.

Fremont, O.—The Great Lakes Sugar Co., which experienced a good measure of success at grinding alfalfa meal last year, is signing up approximately 10,000 acres of alfalfa of the first and second cuttings this year, and plans to contract for the alfalfa from 1,500 acres of the third cutting.

New Holland, O.—Joseph G. Owens, manager of the local elevator of the Ralston-Purina Co. since its opening here in 1934, has been promoted to salesman, with his headquarters in Circleville, and will be in charge of grain purchasing and feed sales in his new territory. He will be succeeded at the local elevator by Lloyd Rowland, who has been Mr. Owens' assistant.

Columbus, O.—W. W. Cummings, sec'y of the Ohio Grain, Mill & Feed Dealers Ass'n, has obtained from the Sales Tax Commission a concession in the form of permission to use a blanket certificate of tax exemption. Instead of a certificate for each sale vendor may retain a copy of each exempt invoice in alphabetical order, for audit, the blanket certificate being kept to show the auditor when he calls to check up sales. The blanket certificate is shown on page 49 in Regulations No. 1.

Columbus, O.—In some industries a unit certificate of exemption from the sales tax is used as a rubber stamp on the invoice signed by purchaser and placed on file in alphabetical order. The definition of "Farming," shown on page 23 of the Regulations, was made by the Tax Commission and is not a part of the law. Efforts are now being made by Sec'y W. W. Cummings of the Ohio Grain, Mill & Feed Dealers Ass'n, to ascertain the legality of this ruling and, if deemed advisable, it is probable a test suit may be started to have the courts decide on its regularity. Some dealers contend the commission's definition of farming is class legislation.

Upper Sandusky, O.—The elevator of William Gregg & Sons, on Feb. 4 was damaged by wind.

## OKLAHOMA

Bennington, Okla.—An elevator at this point burned during the night of Jan. 25. Some corn was in the building.

Retta (r. d. from Blackwell), Okla.—The death of Charles McFarland, manager of an elevator here, occurred at his home on Feb. 4. Mr. McFarland, who was 60 years of age, had had several strokes.

Mountain View, Okla.—Lester Chick, for the past four years employed in the office of the Farmers Co-op. Mill & Elvtr. Ass'n at Carnegie, Okla., has been appointed manager of the elevator of the Farmers Co-op. Ass'n here.

Guymon, Okla.—The Light Grain & Milling Co.'s elevator was broken into during the night of Sunday, Jan. 26, and several articles taken; including an automatic rifle. The intruders had made a fire and eaten a meal of soup and coffee, leaving their cans behind as evidence. They also left some of their clothes.

Oklahoma City, Okla.—Joseph P. White, former vice-pres. of the White-Richert Grain Co. and of the Hydro Seed & Grain Co., with headquarters in this city, died at his home in Weatherford, Okla., Jan. 31, after a week's illness, at the age of 83 years. Mr. White resided in Oklahoma City for 28 years, until 1929.

## PACIFIC NORTHWEST

Palouse, Wash.—The Wallace Grain & Pea Co. is installing pea-splitting machinery having a capacity of about a carload a day.

Pendleton, Ore.—The elevator plant of J. J. Chisholm & Co., Inc., was slightly damaged by an exposure fire recently.

Seattle, Wash.—Floyd Oles, sec'y-manager of the Pacific Northwest Feed Ass'n, is out again after an attack of pneumonia.

Island City, Ore.—The Pioneer Flouring Mills contemplates installing new grain receiving equipment. Some new milling equipment will also be installed.

Seattle, Wash.—Damage estimated at \$6,500 was done to a building, part of which was occupied by a feed mill owned by J. M. Coats, on Feb. 10, the fire starting in the feed mill.

## PORTLAND LETTER.

Oregonians generally breathed a sigh of relief when early returns from the polls showed that the sales tax had been turned down again, and most emphatically.—F. K. H.

Portland and Seattle Grain Exchanges will name sub-com'tes to meet with a similar com'te from the interior to consider the plea from country points that the discount schedule be made more tolerant of what is locally known as m. e. o. g. (material except other grain) when it consists of cobs and chaff.

The Portland Merchants Exchange on Feb. 10 established the first cash grain sample market on the Pacific Slope, prices being made on all grain and millstuffs. Hereafter actual business will name the prices, which have previously been made somewhat arbitrarily. A cash grain com'te will set the price when there is no business.



**WORLD'S LARGEST ELEVATOR**

**13,000,000 BU.—ALBANY PORT DISTRICT COM., ALBANY, N. Y.**

Operated by

**CARGILL GRAIN CO., MINNEAPOLIS, MINN.**

Equipped with **THE GRAIN DRIER WITHOUT A BOILER**

That's a **Randolph**—operated by oil.

Manufactured by

**O. W. RANDOLPH CO., TOLEDO, OHIO, U. S. A.**



## TENNESSEE

At the annual meeting of the Portland Grain Exchange, held Feb. 10, the following directors were elected: Harold Sanford, A. M. Chrystal, Preston Smith, E. T. Pettersen, R. E. McGee, Paul Ostroot, Fay Maloney, William A. Kearns, Ben Greer. From the board the following officers were elected: Pres., Preston Smith; vice-pres., Ben Greer; treas., W. A. Kearns; sec'y, R. E. McGee.

Portland, Ore.—The Oregon State Department of Agriculture held its first Annual Conference in the Imperial Hotel at Portland, Feb. 12, 13 and 14th. The inspectors from all parts of the state were in attendance and much good was accomplished in this meeting. On the evening of Feb. 13th a banquet was served in the Hotel. On the evening of Feb. 14 an order was formed by the members of the department as a social order, known as the "Game Cock." The ladies held a separate meeting. This order is a playground for the members of the department and there were about sixty members that signed up as charter members the first night. Meetings of this order will be held three or four times a year and the annual conference was voted in as a permanent affair.

## PENNSYLVANIA

Berwick, Pa.—The warehouse of the Berwick Store Co., together with a quantity of grain and feed, burned Jan. 30.

Highspire, Pa.—Isaac Mumma, 58 years old, died Feb. 2 from injuries received at the Highspire Flour Mill a few days before, when a belt came loose and struck him on the head, fracturing his skull.

Duncannon, Pa.—The feed mill of W. J. Moffitt burned Jan. 28, at 3 a. m., together with about 30 tons of feed, a hammer mill, 50-h.p. motor, and two trucks. Loss, several thousand dollars; partly insured.

Rimersburg, Pa.—The Rimersburg Mill, owned and operated by C. C. Mortimer, burned shortly after noon Feb. 1; loss, estimated at \$8,500, including \$1,700 on grain and feed; insurance about one-half the loss. The only thing saved was the cash register. Mr. Mortimer expected to use a barn on his property as a temporary warehouse, from which to supply his customers with grain and feeds.

## SOUTH DAKOTA

Dupree, S. D.—John Gress, of Lantry, has succeeded Oscar Herbst as manager of the Bagley Elvtr. Co.'s elevator.

Lantry, S. D.—The elevator here has been closed for the present and John Gress has taken a position as elevator manager at Dupree, S. D.

Menno, S. D.—The Menno Milling & Grain Co. contemplates installing a batch mixer having a capacity of from  $\frac{1}{2}$  to  $1\frac{1}{2}$  tons, also two motors, a. c., three-phase, 5 and  $7\frac{1}{2}$  h.p.

Keldron, S. D.—The Equity Exchange Elvtr. burned recently; loss, estimated at about \$10,000; approximately 75% of the loss covered by insurance. A carload of feed and flour was saved.—Art Torkelson.

Freeman, S. D.—The Park Lane Feed Mills have built an entire new plant and moved their old equipment into it, also adding considerable new equipment. The plant consists of two stories and a basement.

Rapid City, S. D.—The McMahon Co. has awarded contract to the T. E. Ibberson Co. for the erection of a complete grain elevator and seed processing plant, as well as complete feed mill equipment. The work is to be started the forepart of March. The elevator will be divided into 16 bins and will be ironclad. A full basement will extend under all buildings. A Winters Head Drive will be used on the legs in the elevator. A number of legs will be used in this equipment. An improved dump will be used in the driveway and a 28-foot, 20-ton Fairbanks Scale will be used for receiving purposes. An Ideal Hammer Mill will be used for grinding. A corn cracker and grader and a grading outfit will be installed. Modern cleaners will be used thruout. A Fairbanks Hopper Scale will be used for weighing out. Warehouse space will be provided, as well as dust houses. These buildings will be located on the present site the owners occupy at Rapid City and will be adjacent to the large warehouse that they use at this time. J. R. McMahon is the local manager.

## TEXAS

Memphis, Tenn.—Work has commenced on the 1,500,000-bu. re-inforced concrete elevator for Cargill Grain Co. here on Wolf Creek. The plant will be of the catenary or suspended roof type, will be equipped with belt and bucket unloading equipment for river barges and will be completed about July 15. A site about a mile from the point where the Wolf River flows into the Mississippi along the Illinois Central tracks was selected for this new project.

Texarkana, Tex.—Notice of dissolution has been filed by the Texarkana Grain & Grocer Co., elevator operators.

Danbury, Tex.—The South Texas Rice Production Co. (whose headquarters are at Rosahon, Sandy Point p. o.) plans erecting either at this point or at Liverpool, this county, a warehouse 150x400 feet and capable of storing 100,000 sacks of rough rice, work to start in the near future.

Lamesa, Tex.—Construction began on Jan. 20 on the Kimbell Milling Co.'s elevator and storage plant, having a capacity of 150,000 bus. of ear corn and 8 cars of grain. A loader for loading all kinds of grain will be installed. John A. King, who has been with the Kimbell Co. for about 14 years, will be the local manager.

Amarillo, Tex.—The Mayfield Feed & Grain Co., which operates an elevator and warehouse at Dalhart, Tex., plans the immediate construction of a new plant here, to be four stories in height and to have 60,000-bu. storage in addition to mixing machinery and warehouse space. Dairy, poultry and stock feeds will be manufactured, including 10 kinds of mixed feeds and 10 kinds of cottonseed mixtures. Continuous belt mixing of feeds will eliminate loss of time. Twenty men will be employed in the operation of the plant.

## UTAH

Brigham City, Utah—The Jensen Bros. Milling & Elvtr. Co., whose mill was gutted by fire early this month, as reported in the Journals last number, will run its Honeyville mill night and day to take care of business demands until the damaged mill can be repaired.

## WISCONSIN

Soldiers Grove, Wis.—Willy's Feed Mill burned this month.

Merton, Wis.—O. V. Cutting has sold his Merton Flour Mill to Victor Raybaum.

Sullivan, Wis.—Gust Westman's elevator has been taken over by the Sullivan Lbr. & Fuel Co., which plans to operate it in connection with its business.

Milwaukee, Wis.—John Jouno, the Stratton Grain Co.'s feed department manager, has again gone to the hospital for further treatment. He has had several operations.

Milwaukee, Wis.—Cornelius Corcoran, local hay, feed and grain dealer, one of the older members of the Milwaukee Grain & Stock Exchange, died at his home Feb. 23, after a lingering illness.

Frederic, Wis.—Frederic Milling Co., incorporated; capital stock, \$10,000 or 400 shares at \$25 each; incorporators: Walt C. and Daisy E. Stephan and Carl J. Franseen; to operate mills and warehouse and manufacture and sell flour and livestock feed.

Ripon, Wis.—The Badger Farmers Co-op. Elvtr. and an adjoining grocery store (owned by the co-op.) burned early Feb. 13, the fire starting in the elevator; loss, \$40,000; loss partly covered by insurance. Two carloads of grain and feed were destroyed also.

Toledo, O.—O. W. Randolph Co. has just issued a very attractive illustrated broadside describing in detail the Randolph Dehydrating Machine for dehydrating fresh cut alfalfa hay, soy bean hay and many other products. A copy of this broadside will be sent readers of the Journal who write the company requesting it.

## Truck Loads to Bushels

Direct Reduction Grain Tables on cards reduce any weight from 600 to 12,090 lbs. to bushels of 32, 48, 56, 60, 70 and 75 lbs. by 10-pound breaks. Just the thing for truck loads.

Printed from large clear type on both sides of six cards, size  $10\frac{3}{4}$  x  $12\frac{3}{4}$  inches with marginal index, weight 1 lb. Price, \$1.25, plus postage. Order 3275Ex.

## Grain &amp; Feed Journals

CONSOLIDATED  
332 So. La Salle Street  
Chicago, Ill.

## Railroad Claim Books

require little of your time for filing, and contain spaces for all the necessary information in the order which assure prompt attention on the part of the claim agent. They increase and hasten your return by helping you to prove your claims and by helping the claim agent to justify payment.

A is for Loss of Weight in Transit Claims.  
B—Loss in Market Value Due to Delay in Transit.  
C—Loss in Quality Due to Delay in Transit.  
D—Loss in Market Value Due to Delay in Furnishing Cars.  
E—Overcharge in Freight or Weight.

These claim blanks are printed on bond paper, bound in book form, each book containing 100 originals and 100 duplicates, a two-page index, instructions and summary showing just which claims have not been paid, and four sheets of carbon.

The five forms are well bound in three books, as follows:

411-A contains 100 sets all Form A. Price, \$2.00. Weight 3 lbs.

411-E contains 100 sets all Form E. Price, \$2.00.

411-5 contains 60 sets Form A, 10 Form B, 10 Form C, 10 Form D and 10 Form E. Price, \$2.00.

## Grain &amp; Feed Journals

CONSOLIDATED  
332 South La Salle St. Chicago, Ill.



## Grain Carriers

Ice is unusually thick in the harbor of Ft. William, 30 to 32 ins., with a foot of snow. At Duluth the ice is 19 ins. thick.

Gulf westbound intercoastal soybean oil meal rates, effective Feb. 13, have been suspended until June 13 by suspension order No. 57 of the Department of Commerce.

Three grain carrying vessels of 9,000 tons each are being built for Louis-Dreyfus, grain dealers, of France. The first, named the Louis Louis-Dreyfus, was launched Jan. 25 at Dunkirk.

Grain and grain products were loaded into 28,544 cars during the week ending Feb. 8, against 25,217 cars during the like week of 1935, as reported by the Ass'n of American Railroads.

Washington, D. C.—The Interstate Commerce Commission has extended from Mar. 2 to Mar. 23 the time in which motor carriers are required to file schedules of rates and charges that will become effective interstate Apr. 1.

Five-days' notice only is needed for railroads to publish half-rates on seed wheat, oats and barley from points in Minnesota and Wisconsin to points in Minnesota and the Dakotas, under drought order No. 23 of the commission. Such rates must expire May 15.

Vicksburg, Miss.—Shippers are seeking an injunction against the order of the Mississippi Railroad Commission setting intrastate rail rates on grain and feed shipments that have been carried by water to Vicksburg, and reshipped by rail to Jackson and other Mississippi points.

St. Louis, Mo.—The Federal Barge Line will start shipping operations on the Mississippi river on Apr. 2 when the first boats will go north to Davenport and St. Paul. Sailings for Peoria, Kansas City and Chicago are scheduled for Mar. 3, 6, and 14, respectively.

Shippers' Advisory Board meetings have been scheduled as follows: Southwest, Mar. 5, Beaumont, Tex.; Trans-Mo.-Kan., Mar. 11, Kansas City, Mo.; Allegheny, Mar. 12, Pittsburgh, Pa.; Ohio Valley, Mar. 17, Columbus, O.; Southeast, Mar. 19, Birmingham, Ala.; Pacific Coast, Mar. 20, Los Angeles, Cal.; Great Lakes, Mar. 25, Toledo, O.

The Capital Grain & Feed Co. and others and traffic buros of Birmingham, Nashville, Florence and Rome (Ga.) have petitioned the I. C. C. to vacate and set aside its order involving carload rates on grain and grain products to Montgomery, Birmingham, Florence and Huntsville, Ala., Nashville, Tenn., Rome, Ga., and other destinations.

Six years ago the railroads had 23,863 freight locomotives in serviceable condition and 4,880 in unserviceable condition. In October, 1935, they had only 16,342 in serviceable condition and 8,480 in unserviceable condition. This marks a decline of 31% in the number of serviceable locomotives, compared with a decline of 33% in weekly freight loadings from the 1925-1929 average. Freight loadings, however, have increased 20% since last summer, and the trend is upward, with the railroads battling to hold and regain traffic they have lost.

Judge Otis of the U. S. District Court at Kansas City on Feb. 19 denied the right of a flour buyer to intervene in the recovery of processing taxes paid by the mill. Intervener was Alvin Eades of Evansville, Ind., whose petition stated that the mill had charged him \$1.38 extra per barrel on account of tax. The court held that plaintiff had no right to the refunded tax.

## Decisions and New Complaints

Before the Interstate Commerce Commission:

In No. 26,798, Sauers Milling Co., v. L. & N. Examiner John J. Crowley proposed grain rates from Illinois points to Evansville, Ill., transited and reshipped as flour to Athens, Ala., prior to Nov. 23, 1934, be found applicable. Shipments were misrouted. Rates applying were 38.5, 37.5 and 35.5 cents but collections were only 34.5 cents. Waiver of undercharges recommended.

Under 4th Section application No. 16047 carriers are permitted to make the lowest rates possible on cottonseed and its products on the basis prescribed in the Cottonseed Case, from West Memphis, Evadale, Osceola and Blytheville, Ark., and Sikeston, Mo., to destinations in official territory, including Illinois territory and Ohio River crossings, over long routes on which they have class rate relief.

Great West Mill & Elevator Co., Kell Mill & Elevator Co., and Wichita Mill & Elevator Co., have petitioned the I. C. C. for reconsideration and modification of findings in Docket 17,000, Part VII, grain and grain products within the Western District for export. The same rates, differential rates, and area of Texas Common Point Territory as is prescribed for Texas interstate traffic is sought for Texas intrastate traffic.

Fourth Section application No. 16162, cottonseed and peanut meal and cake for export. By Division 2. Parties to Pope's I. C. C. No. 1921, except the Tennessee Central, were authorized to make rates on these products in straight or mixed carloads, from points in southern territory to Gulf, South Atlantic and Virginia ports for export, without observing the long-and-short haul clause. Loads must be 80,000 lbs. or more, and rates are limited to those routes where class rates relief are already in effect.

## Buy Elevators to Abandon Railroad

That the railroad company could afford to buy the grain elevators at three stations and wreck them rather than continue operation of its branch line is explained by Chas. D. Mahaffie, chairman of the Interstate Commerce Commission, in his dissenting opinion in the case of the Kansas Southwestern Railroad, which is permitted to abandon 6.3 miles of line between Geuda Springs and Arkansas City, Kan., but denied the abandonment of approximately 15 miles between South Haven and Geuda Springs. Commissioner Mahaffie said:

"The applicant has shown that it will operate the segment required to be kept in operation at a continuous out-of-pocket loss of around \$6,000 per year. In addition it seems to me it has made as good proof as could be made that if the line is to be kept in operation the rail must be relaid at a cost of perhaps \$80,000.

"It is true that this 50-year-old 52-pound rail probably can be made to serve somewhat longer, but it would not do indefinitely and if the line is to be kept in business, undoubtedly the equipment weight that must be used on it will make it economical even at that cost for the Santa Fe (lessee) to incur the expenditure. As I see it, therefore, the question gets down to whether the public convenience served is sufficiently important to require the applicant to continue an unprofitable enterprise at these costs.

Elevator Investment. — "Geuda Springs is served by the Midland Valley. Apparently the only reason to keep the Santa Fe service at that point is because an elevator there, which is said to represent an investment of \$4,500, would have only salvage value if this railroad were abandoned. Geuda Springs is 5.1 miles east of Ashton, and the net effect of the decision is to keep that 5.1 miles of railroad in service to serve one grain elevator. Clearly, the loss to this elevator owner is not of such weight as to offset the sacrifice required to be made by the applicant in continuing to maintain this portion of the line.

"The other points, Ashton and Portland, also have elevators, which according to the report, handle from those towns an average of around 72,000 bushels of grain per year. Portland is six miles from South Haven, where there appears to be ample facilities for handling grain. Ashton is four miles farther from South Haven, but somewhat nearer to Geuda Springs, which would continue to be served by the Midland Valley if this application were granted.

Should Truck to Other Railroad. — "No portion of the territory served by this line is much over ten miles from a station on another railroad. That distance is not serious to a grain farmer in these days of easy truck transportation. It is obvious that this abandonment would affect the farming population very little. The chief protest is made by the elevator operators and, of course, they would be hurt. Balancing the situation between the applicant and the opera-

tors, however, I think it can be resolved only in favor of granting the application.

"This case presents a situation that is common. Much railroad mileage built in the days of wagon-hauls over dirt roads has been rendered obsolete by the development of trucks and by road improvement. To continue to maintain and operate such mileage is an economic waste. It unnecessarily burdens other transportation, and the shipper, as is customary in the case of wasteful transportation, ultimately must make up the loss.

"Truck transportation is here to stay. That fact calls for revision of the railroad map. We ought not stand in the way of necessary revision. Railroad transportation is still essential. If it is to be maintained on a sound basis the railroad plant and service must be adjusted to present conditions."

## Minneapolis-Chicago Wheat Products Rates

Minnesota milling interests testified that the shortage of wheat in the Northwest and the poor quality of the 1935 wheat that survived the blight or black rust, made it necessary to mix better quality wheat from other sources with such Northwestern wheat as is available before milling, in I. & S. No. 4134, Minneapolis to Chicago rates on wheat products.

F. S. Keiser, traffic commissioner, Duluth Chamber of Commerce, declared the identity of Duluth as a grain market could be preserved only thru general free transit at Minneapolis on grain from Duluth to Chicago, Peoria and St. Louis. Since his proposal is contrary to the decision in Docket 17,000, Part VII, he proposed as an alternative that the 4½ cent proportional rate from Duluth to Minneapolis be cancelled and that there be introduced a 4½ per cent import rate to Minneapolis, a 12 cent Duluth to Chicago and Peoria rate, a 15 cent Duluth to St. Louis rate. Thus nothing would be paid on Duluth to Minneapolis traffic until it was determined whether the grain moved outbound into proportional territory.

Railroads protested that the proposal meant free hauling of grain from Duluth to Minneapolis, and that any attempt to establish free transit would inevitably force free transit at Minneapolis on grain from the Northwest to Duluth, which would cause lake movement eastward of grain products.

In the case being heard Minneapolis millers seek a proportional rate of 8 cents on wheat products from Minneapolis and St. Paul to Chicago and points in the same grouping, on traffic destined east of Illinois, as proposed in the schedules suspended in I. & S. 4134. Minneapolis mills contend they must draw wheat from the Southwest to make suitable flour.

Members of the North Dakota Board of Railway Commissioners will oppose the emergency reduction in rail rates from 12 to 8c per 100 lbs., on grain products shipped from Minneapolis to Chicago, originating in the Southwest or at Duluth, suspension now being subject at the hearing. The North Dakota Commission raised the claim that the reduction was injurious to the North Dakota wheat growers.

C. F. Macdonald, B. C. McCabe, G. C. Wilson, C. C. Blair, K. S. Bagley and W. R. McCarthy, all of Duluth, were among those present.—F. G. C.

Pres. Roosevelt has signed the deficiency appropriations bill carrying \$296,000,000 to pay farmers for reducing acreage of crops under contract with the AAA.

## Books Received

SEASONAL TENDENCIES in wheat futures prices have been studied by H. S. Irwin, agricultural economist, who describes the summer and winter cycles of price movements in a 27-page mimeograph issued by the Grain Futures Administration, Washington, D. C.



# Field Seeds

**Mendota, Ill.**—A branch seed store has been opened by the Bruns Seed Co., of Davenport, Ia.

**Stafford, Kan.**—The Alfalfa Valley Seed Co. has been granted a charter, with \$10,000 capital stock.

**Gary, Ind.**—M. Mack is removing his Gary Seed Store to more commodious quarters at 852 Broadway.

**New York, N. Y.**—January shipments of clover seed were 4,148 bus., compared with 9,528 bus. in January, 1935.

**Luella, Ga.**—W. H. Bailey has recently installed a special seed cleaner, furnished by the Sidney Grain Mch. Co.

**Bowling Green, Ky.**—Growth of its business has forced the McFarland Seed & Implement Co. to remove to more commodious quarters.

**Carrington, N. D.**—Seed store proprietor A. E. Ireland, 68, died Feb. 7, at the Carrington hospital. A brother and a sister survive.

**Monmouth, Ill.**—H. D. Wray has organized the H. D. Wray Seed Co. to do business in the former quarters of the Wray-Britt Seed Co.

**Paris, Tex.**—J. A. Drummond, aged 90, has retired from Drummond's Seed Store, which will be continued by his brother, M. F. Drummond.

**Falls City, Neb.**—The Earl E. May Seed Co. has been granted an order of court temporarily restraining the collection of a \$200 occupation tax.

**Bismarck, N. D.**—A loss estimated at \$25,000 was sustained when fire destroyed the warehouse and offices of the Dakotah Seed Co. on Feb. 12.

If the Soil Conservation bill being promoted in Washington becomes a law, seed interests expect to reap a rich harvest from the demand for grass seeds.

**Bellevue, Ia.**—Fred Simpson, seed retailer, will move his seed store, which has been under the management of Fred Riant, to the Beck building in the near future.

Germination of corn is said to be speeded up 28 hours by subjection to long and short radio waves, according to experiments by Dr. Wilborn J. Deason of Chicago.

**Minneapolis, Minn.**—Seed corn supplies in Minnesota and other northwestern states are short, warn University farm experts, who urge early germination tests on corn saved for seed.

**Springfield, Ill.**—A copy of the seed and weed laws of Illinois, with a description of the methods of eradication, may be obtained by writing the Division of Seed Inspection, Centennial Bldg., Springfield.

**Washington, D. C.**—Loans to farmers as high as \$500, secured by a first lien on the crop, are authorized in the \$50,000,000 seed and feed loan bill, approved on Feb. 12 by the House and sent to the Senate for final approval.

**Oklahoma City, Okla.**—Officers elected at the annual meeting, Jan. 27, of the Oklahoma Seedsmen's Ass'n are: M. Martin, Muskogee, pres.; Frank O'Bannon, Claremore, vice pres., and H. E. Grisham, Oklahoma City, sec'y-treas. Retiring Pres. Frank Keller, of Shawnee, reviewed the events of the past two years. J. F. Hickey reported for the legislative com'tee.

**Dallas, Tex.**—Dr. Miller of "Herbae-Mira" fame has been jailed here. The new name he has coined for the ordinary meadow fescue seed he sells is, "Che-Mah," at \$1.00 to \$1.50 per pound. His incarceration here followed an investigation by the Dallas Better Business Bureau instigated by A. J. Biggio of the Robert Nicholson Seed Co.

**Cedar Rapids, Ia.**—J. E. Ives, aged 70, died Feb. 20 at the University Hospital, Iowa City, from a heart attack, while convalescing from an operation. Until his retirement 10 years ago he had been for 30 years foreign representative of the Albert Dickinson Co., Chicago. He had crossed the Atlantic eighty times and made 26 voyages to South America.

**Madison, Wis.**—H. T. Draheim, Gotham, Richland county grower, was named grand champion at the 1936 Wisconsin state grain show. He showed the best 10 ears and the best 50 ears of yellow dent corn grown in the south section of the state, and took other prizes in dent corn, flint corn, barley, sheaf barley, late and early oats, and bundle alfalfa.

**Manhattan, Kan.**—Walter A. Claassen of Whitewater was awarded a medal as premier seed grower of Kansas during 1935, at a banquet of the Kansas Crop Improvement Ass'n early this month. Claassen, 37-year-old owner of a 1,400 acre farm, produces certified seed of Kanota oats, atlas sorgo, alfalfa, korean lespedeza, biennial white blossom sweet clover, and tenmarq wheat.

## Seed Corn Tests in Indiana

Dr. C. T. Gregory of Purdue recently completed testing of seed sent to him by 254 farmers in 74 counties. He found 92.4 per cent germination, 44.3 per cent moldy seed, 17.5 per cent weak seed, 3.3 per cent of the ears affected with Diplodia, or corn root rot. The most interesting information gathered from these data is the relatively high percentage of weak seed corn found in the samples tested.

Dr. Gregory says: "Before accepting any ear, pull out at least eight kernels from the butt to the tip of the ear. These kernels should be filled with the hard, well matured starch from tip to cap. Kernels that are not mature will have soft, starchy, pinched tips or may show the starchy condition thruout the greater part of the kernel. After the seed corn has been carefully culled in this way, farmers are urged to use the rag doll test of at least 40 ears taken at random from the good ears."

## Misbranding of Seed

L. P. Cook, Memphis, Tenn., shipped 18 bus. sorghum seed labeled in part, "Germination Approx. 80%, Other Crop, .01%, Inert, .01%." Federal analysis showed this seed shipment had an average germination of 61%, 2.2% other crop seed, and about 11.3% inert matter. Another shipment by Cook was 10 bus. red oats labeled "Winter Turf Seed Oats," which is a gray variety. Misbranding of the oats and sorghum seed was detected by the Alabama State Department of Agriculture. For the misbranding a fine of \$200 was imposed, the fourth assessed against Mr. Cook, 14 of whose shipments have been condemned.

The Sun-field Seed Service, Chicago, Ill., shipped to Alabama 50 bus. of seed labeled "Mammoth Cluster Oats" that was in fact Victory oats, a gray variety. The court ordered the seed to be destroyed or given to a charitable organization for feed.

## Changes in Ohio Seed Law

The attention of Ohio grain and seed dealers, and of the trade shipping into Ohio, is directed to a new section in the Ohio Seed Law, Section 5805-4, which provides for the labeling of mixtures and requires the per cent of pure seed and the germination of each kind of seed in the mixture, whether weed seeds or lawn seeds. Mixtures containing over 15% inert material and 3% weeds are prohibited. Another new Section 5805-5 provides for the protection of the word "certified," as applied to field seed, seed potatoes, fruit, plants and requires (a) the name and address of the grower, (b) the name of the certifying agency, (c) the state of production, (d) grower's number to be registered with the Director of Agriculture, etc.

Section 5805-13 provides for a sliding scale of license fees based upon the amount of seed sold or exposed for sale. Sale of 10 pounds and over requires a \$5 license fee. The germination and date of test should be attached to each container from which bulk seeds are sold.

Section 5805-13 (e) provides that each truck offering or exposing seed for sale shall be licensed in the amount of \$5 and all seed sold shall bear a proper label, as required by Section 5805-2 and 5805-4. All licenses issued covering such trucks shall be conspicuously posted or displayed on the vehicle.

Regulation No. 6, recently adopted by the Ohio Department of Agriculture on the use of the word "hybrid," as applied to field, sweet and pop corn, is as follows:

"No person, firm or corporation shall offer for sale or distribute within the State of Ohio for seeding purposes within this State, any seed of field, sweet or pop corn labeled or represented to be 'hybrid' corn unless such seed represents the first generation of a crop between strains of different parentage and involving one or more inbred lines of corn or their combinations."

This regulation is to prevent sale of open pollinated top crossed seed corn as hybrid corn and also to prevent the use of second generation corn as hybrid which has been found to be as much as 35% inferior to open pollinated varieties.

## Soybean Germination Good

Sixty samples of Iowa soybean seed, from 37 counties representing every section of the state, showed average germination of 83.9 per cent in the seed laboratory of the Iowa State College. All samples were of the 1935 crop, taken from threshed beans, or from plants standing in the field. The highest germination shown was 98 per cent, the lowest 22 per cent.

Soybeans apparently can stand considerable moisture. One sample, taken from a plant late in December, had moisture content of 22 per cent, yet germinated 85 per cent.

## Directory

### Grass and Field Seed Dealers

<b>CRAWFORDSVILLE, IND.</b>	
Crabbs, Reynolds, Taylor Co., clover, timothy.	
<b>GREEN SPRINGS, OHIO</b>	
The O & M Seed Co., seed merchants.	
<b>MILWAUKEE, WIS.</b>	
Kellogg Seed Co., field seed merchants.	
<b>PAULDING, O.</b>	
Stoller's Seed House, wholesale field seeds.	
<b>ST. LOUIS, MO.</b>	
Mangelsdorf & Bro., Ed. F., wholesale field seeds.	
<b>SIOUX CITY, IOWA</b>	
Sioux City Seed Co., seed merchants.	



## Seed Corn Scarce

Adequate supplies of seed corn will be hard to find this year, advises W. W. Cummings, sec'y, Ohio Grain, Mill & Feed Dealers Ass'n, seeking to learn if slowly dried and carefully handled kiln dried corn can be successfully used for seed. He quotes H. C. Ramsower, director of the Ohio State University agricultural extension service on planting of inferior seed:

"Tests made by the agronomy department show that nearly all corn runs high in moisture content so that damage by low temperatures is very probable. Growers who believe that their corn has been well selected and well cared for since harvest should make a complete test by taking two kernels from each ear and sprouting them. If 90 per cent show strong sprouts the corn will be good enough for seed if kept properly stored until planting time."

## Stricter Seed Control in Arkansas

Little Rock, Ark.—All seed offered for sale by merchants must hereafter be tagged to show germination and purity, regardless of whether it was grown by a local farmer or obtained from a commercial seedsman. Inspectors have not heretofore ordered local-grown seed off sale, when found untagged in stores, but hereafter no distinction will be made.

Need for stiffening the requirements was brought to the Board's attention when a quantity of local-grown soybean seed sold by a Stuttgart merchant failed to come up when planted. Germination tests made on a sample of the remaining seed showed the seed to be entirely devoid of life.

Much low grade lespedeza seed is now being sold, the most objectionable feature of which is the presence of large amounts of the seeds of dodder, or love vine, as it is frequently called. Often several thousand dodder seed are found per pound of the lespedeza seed. Buyers of lespedeza seed should look for the tag. If there are no dodder or other noxious weed seeds present, the statement on the tag should read "Noxious weed seed—None." If dodder is present, the statement should read "Noxious weed seed—Dodder." If there is no statement as to noxious weed seeds, the seed is being sold in violation of the law.—Paul H. Miller, chief inspector Arkansas Plant Board.

**CRABBS REYNOLDS TAYLOR CO.**  
CRAWFORDSVILLE, IND.

**GRAIN**

**Clover and Timothy Seeds**  
GET IN TOUCH WITH US

**ED. F. MANGELSDORF & BRO.**

Buyers and sellers of  
Sweet Clover, Alfalfa, Lespedeza, Clovers, Timothy, Grasses, Fodder, Seeds, Sudan Grass, Soy Beans, Cow Peas  
St. Louis, Missouri

## FIELD SEEDS

WRITE OR WIRE FOR PRICES

**SIoux CITY SEED CO.**

Truck Service from the following warehouses:

Sioux City - - - - -	Iowa
Sioux Falls - - - - -	So. Dak.
Norfolk - - - - -	Nebr.
Carroll - - - - -	Iowa
Billings - - - - -	Mont.
Algona - - - - -	Iowa
Fairmont - - - - -	Minn.
Albert Lea - - - - -	Minn.

Samples Furnished On Request

## Misbranded Seed by Truck

John E. Casey, seed analyst for the Arkansas Plant Board, Little Rock, reports early February shipments of grossly misbranded seed as:

Green Brothers, Gallatin, Tenn., to Harrison, Ark., two shipments by truck containing 83 bags of lespedeza seed. Tags attached showed purity of 97 per cent, and 3 to 5 dodder seed per 5 grams. Tests showed purity of 90 per cent, most of the impurities being weed seeds, and approximately 25,000 dodder per pound of seed.

Two shipments, consisting of 15 bags of lespedeza seed were brought by truck from West Plains, Mo., to Mountain View, Ark., by Paul Gowens. Green Brothers' tags were attached, showing 98 per cent purity, whereas tests showed 95 per cent purity, and 12,000 to 21,000 dodder seed per pound.

## Seed Inspection in Illinois

Lewis A. Moore, acting chief analyst, in his report for the 12 months ending June 30, 1935, states that: The percentage of samples representing seed that is unsalable for seeding purposes in this State varies from 2 per cent to 60 per cent. The wide distribution and abundance of noxious weed seeds is shown in every county. However, the percentage of samples containing noxious weed seeds varies from 12 per cent to 83 per cent. Of special interest is the distribution of samples that do not contain either noxious weed seeds or common weed seeds. It is noted that in one county only 3 per cent of the samples were free from weed seeds, while in another 48 per cent were weed free.

If the quality of seed produced in Illinois was as high as that produced in certain counties, Illinois producers would be enjoying premium prices for their seed crops and much of the expense of the processing would be eliminated. The tabulation supports the assertion that some counties are "seed conscious."

During the past year 153 lots of seed shipped by firms outside of the State were examined and samples taken. Fifty-nine of these samples represented lots of seed that were unsalable in Illinois. The greatest number of unsalable lots were lespedeza. Almost 50 per cent of the lespedeza shipped into Illinois, chiefly by truck, contained noxious weed seeds in such large proportions that its sale had to be prevented. The next in order were mixtures bearing high sounding names which were of very low quality, a little better than "tailings" and often contained seeds of plants not at all adapted to Illinois climate. It will be noted that 18 out of 42 samples of red clover were unsalable. Ten of these samples were taken in Illinois counties where, heretofore, the Illinois Seed Law had been disregarded.

Fines for the violation of the Illinois Seed

Law totaled \$439.72; \$41.13 were received from the sale of seed and \$329.00 were received as fees which are paid for the purity analyses and germination tests in excess of the five provided for in section 12 of the law. A total of \$809.85 was remitted to the State treasury.

## Quivira, an Early Maturing Variety

Fortunately, efforts to produce an early wheat were not limited to one cross. In 1921 seed of a cross between Prelude, an early variety of Canadian hard red spring wheat, and Kanred, hard red winter wheat, was received from the United States Department of Agriculture. During the years 1922-1928 large numbers of selections of this cross were tested in the wheat-breeding nursery at Manhattan. One of these, Kansas No. 2628, appeared promising enough so that it was advanced to the plot tests in 1928. In 1932 this selection was registered by the American Society of Agronomy and the Bureau of Plant Industry under the name of Quivira. This early-maturing variety yields well, has stiffer straw than Kanred, is as winterhardy as Blackhull, and is highly resistant to red leaf rust. Grain of Quivira is likely to shatter from the heads when fully ripe. This is a serious defect in the dry, windy climate of the western Great Plains.

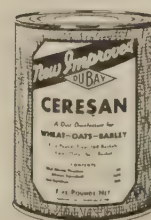
The great advantage of Quivira lies in its earliness. This new cross-bred variety is nearly a week earlier than Turkey and Kanred, and yields about as well as Early Blackhull. Flour of Quivira contains more of the yellow color known as carotene, than flour of Tenmarq, but is not much yellower than flour of Turkey and Kanred. It is the policy of the Kansas experiment station to try to determine all the important agronomic and quality characteristics of a new variety before it is approved for increase and distribution. Quivira has not yet been approved as a standard variety and will not be until and unless further tests prove that it will be satisfactory to farmers and millers.

Wiedlocher & Sons of Springfield, Ill., joined in feeding the birds starved by the blanket of snow. Several hundred sacks of feed were prepared in light bags which would break and scatter the grain when dropped from an airplane.

**Get bigger yields of  
WHEAT - OATS - BARLEY**

**New seed treatment costs less  
to use and gives better results**

For less seed decay, better stands and bigger, high-quality yields of wheat, oats and barley, crop authorities now advise treating these seed grains with the *New Improved CERESAN*. Half an ounce treats one bushel of seed. Can be applied by gravity treater with no labor of turning, very little flying dust. Cereal Pamphlet and Blue prints for making gravity treater from an old oil drum sent free. Bayer-Semesan Co., Inc., Wilmington, Delaware.



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Growers & Dependable Seed  
Green Springs, Ohio

A certain feeling of satisfaction and confidence goes with the planting of O & M seeds. Their excellence, uniformity, dependability and yield have completely won over thousands who wouldn't think of accepting a substitute.

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Field Corn - Sweet Corn  
Seed Oats - Garden Seed  
Grass Seed





Roadside Advertising for an Iowa Elevator.

## Novel Advertising of Iowa Elevator

By F. L. CLARK

The newest elevators on the landscape of northeastern Iowa are miniature reproductions of the oldest elevator in that part of the state the elevator of Hall Robert's Son at Postville, built 70 years ago, and in continuous operation since.

The attractive signs have been set up recently as roadside advertising inside farm fences, beside main highways leading into the principal towns within 50 miles of the Roberts elevator.

They were made by covering a wood frame replica of the elevator 3 ft by 4 ft. in size with sheet iron. They are painted green with white and orange lettering as follows: "Miles to Postville elevator. SEEDS Hall Robert's Son."

Beneath the signs for decorative purposes are bright green lattices made from salvage lath. "They were made," Mr. Harvey Roberts, proprietor of the elevator, said, "by men employes at the elevator while watching our seed cleaners, which this winter are running twenty four hours a day."

## Garnet Wheat Undesirable

Garnet wheat is an inferior variety and the Northwest Crop Improvement Ass'n considers it most unfortunate that anyone should consider importing it into any section of the hard red spring wheat region. The variety yields less than Ceres or Marquis and it has lower market value due to the extreme yellow color of the flour.

Garnet was produced from a cross between Preston (Velvet Chaff) and Riga. It matures early, about the same as Reward, and is susceptible to field sprout damage. It is a beardless wheat with short, tapering heads. The chaff is smooth with a yellowish white color.

The commercial inferiority of Garnet is vividly illustrated by the fact that the present Canadian grain grades provide separate classes for Garnet and further stipulate that a mixture of over one per cent Garnet will exclude such wheat from No. 1 Manitoba Northern. No. 2 Manitoba Northern will carry only up to 3 per cent admixture of Garnet.

The North Dakota Agricultural Experiment Station in Circular No. 46 states in part, "Garnet is susceptible to stem rust, resistant to bunt, matures about five days earlier than Mar-

quis. Garnet yields have averaged lower than Marquis."

In South Dakota, Garnet was tested for six years at the state experiment stations at Brookings and Highmore. They conclude in part (Agri. Exp. Station Bulletin 268), "This variety, due to low yields shown, should not be grown in South Dakota."

## A Chart for Dust Treatments

The proper volume and kind of DuBay seed disinfectants to use in the treatment of cereals, field crops, flowers, grasses, and vegetable seeds are handily recorded in a convenient chart that has been made available by the Bayer-Semesan Co., Inc.

New improved Ceresan is recommended for control of scab seedling blight, covered smut, barley stripe, and black loose smut at the rate of  $\frac{1}{2}$  oz. of dust per bushel of barley seed. The same treatment applies to oats for control of scab seedling blight, loose and covered smuts; for wheat to control the surface borne flag smut, scab seedling blight, bunt or stinking smut; and for rye to control scab seedling blight, stem smut, and stinking smut.

For field corn the new improved Semesan, Jr., at the rate of 2 oz. per bushel of seed is recommended as a dust treatment for control of seed rotting, seedling blights, and root-rots. A 2% Ceresan, at the rate of 2 oz. per bushel of seed, is recommended to control kernel smuts of sorghums. Semesan at the rate of 2 oz. per bushel of seed is recommended as a dust treatment to prevent seed rotting, leaf and pod-spot in soy beans.

These dust treatments have won enviable reputations, and are recommended by many official agencies to control the smuts and other surface borne plant diseases. Plans for the construction of hand and gravity seed treaters are also given.

This valuable seed treatment chart will be sent free on request to the Bayer-Semesan Co.

About 35 soybean mills and a number of cottonseed mills are crushing soybeans for oil and oil meal; 20 concerns are manufacturing soybean food products, 15 mills making soybean flour and more than 50 factories making various industrial products, according to the U. S. Dept. of Agriculture.

## Crested Wheat Grass

At the Judith Basin station in Montana cattle pastured more days and made greater gains on fewer acres of crested wheat grass than on brome or native grass. The pasture season in 1934 and 1935 averaged 141 days for crested wheat grass, 125 days for brome and only 55 days for native grass. The average gain per steer in pounds was 291 for crested wheat, 249 for brome and 115 for native grass. It took 7.16 acres of crested wheat grass to carry a steer for six months as compared to 8.16 acres of brome and 20.33 acres of native grass.

Crested wheat grass supplements native grass by coming on in the spring two to four weeks earlier and holding on in the fall for four to six weeks longer when moisture conditions are favorable. It has unusual ability to combat weeds. At Havre, Mont., crested wheat grass was drilled on abandoned land covered with dense weed growth. In about 5 years there was an excellent stand of grass, with virtually no weeds.

Crested wheat grass is best suited where winters are cold and summers rather dry. It withstood the 1934 drouth at Dickinson, N. D., which killed nearly all the alfalfa, brome and slender wheat grass. It has stood drouth and cold better than any other grass at Mandan, N. D. Its growth in 1935 after the severe weather of 1933 and 1934 strengthened its value in relation to other grasses of this area. At Highmore, S. D., where drouth was worse in 1933 and 1934 than at Mandan, crested wheat grass produced an excellent crop of hay and seed in 1935, although seed was reduced by drouth early in July.

The first planting of crested wheat grass at Mandan was made in the spring of 1915. So far as known this is the oldest planting in the country at the present time. The twentieth crop was harvested from it in 1935. The yield per acre in 1935 was at the rate of 2,121 pounds of air-dried hay per acre. It was the sixth highest yield during the 20 years. The 20-year average yield per acre was at the rate of 1,804 pounds. Seed production of crested wheat grass during 1935 was one of the best of record.

In 1935 rust was prevalent thruout the Mandan area. Many of the grasses, especially slender wheat grass, was badly infected. No trace of rust has ever been found on crested wheat grass at this station.

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## The Seed Situation in 1936

By E. R. AUSEMUS, Agronomist, University Farm, Before Minnesota Farmers Elevator Ass'n.

The seed situation is worse than it was in 1917, after the rust epidemic of 1916, as there was more old seed available for planting.

Minnesota farmers require in an average normal year enough hard spring wheat seed to sow approximately 1½ million acres, North Dakota a million, South Dakota 1¼ million, and Montana 3 million, or seed enough for a total for the four states of approximately 12 million acres.

For the durum, Minnesota sows in a normal year about 160,000 acres, North Dakota 2½ million, South Dakota one million, and Montana 40 thousand, a total for the four states of approximately four million acres.

It is probable therefore that many farmers will have to use the light weight wheat seed of the 1935 crop for seeding in 1936.

**As test weight declines** there is a reduction in the vigor of the seedling growth but it is difficult to give the particular weight where this reduction in vigor really occurs. The seedlings from a 60-lb. wheat are much more vigorous than from a 50-lb. wheat, and the seedlings from a 50-lb. wheat are considerably more vigorous than those from a 45-lb. wheat. The reason for this smaller seedling from the shriveled seed is the lack of stored plant food. The larger, heavier seed furnishes more plant food to the young seedling while it is establishing a root system in the soil so therefore produces a more vigorous plant.

Why is this vigor of seedling so important? The more vigorous seedling is better able to withstand the hazards of spring such as adverse weather conditions and poor seed bed preparation.

**Seed Treatment**—Duplicate samples of Thatcher, Marquis and Ceres varieties were treated with New Improved Ceresan at the rate of ½ oz. per bushel, 24 hours before seeding. The treated samples gave an average increase in germination from 10 to 15 per cent as shown by chart No. 3. Tests conducted by the U. S. Department of Agriculture show that by treating with copper carbonate, the germination is the same, and the use of formaldehyde actually reduces the germination about 20 per cent and this injurious effect appears to be the same regardless of test weights. Seed of the 1935 crop carries a large amount of Gibberella and other organism on it and the treating with N. I. Ceresan kills these organisms. Seed germinating less than 70 per cent in sand or soil and 80 per cent by the blotter method should not be used.

In normal years when the plump wheat seed germinates 95 to 100 per cent, only about 80 per cent of the seed grows when planted in the field and produces mature plants.

**Thatcher wheat** was about the only recommended variety which produced grain suitable for seed in 1935 in Minnesota. A number of growers in the state had small acreages of Thatcher and are able to supply a part of the demands for good wheat seed, and considerable quantities of seed of this variety have been shipped out of Minnesota to Canada and adjoining states. There is, however, according to the records of the Minnesota Crop Improvement Ass'n a part of this seed still available.

**Will Use Local Seed**—It seems likely then that most farmers will use local seed for planting in 1936. Here is, I believe, the biggest problem, that of determining if the light weight seed the farmer now has is suitable for planting. Help the farmers to locate supplies of best seed in their own neighborhood. Then recommend and point out to them the necessity of making a germination test of all lots of seed to be used for plantings next spring since test weight is not an indication of the germinating ability of a sample.

**Germination Test**—There are several methods of making these tests on the farm. Your

men should learn to make these tests and be able to advise farmers both how to make them and how to read them. These germination tests can be made in a box of sand or soil, "the cloth in saucer method" or by the "paper or rag doll" method. We have found that germination percentages are about 10 per cent higher when made between blotter, than when made in soil or sand. When the light weight seed germinates between blotters, some of the sprouts are very weak and die. If you are not careful, they may be counted as germinated seed and result in a higher germination percentage than you really have. It would be better yet to make some germination tests yourselves in your office of wheats having different test weights. Seed of wheat testing 60 lbs. or better, should be germinated with the lighter weight seed in order to show the difference in the vigor of the seedlings from the light and heavy weight seed. If you cannot make this demonstration in your own elevator, perhaps you can arrange to have it done by some local agency, such as the county agent or high school. If possible, seed testing at least 40 to 50 pounds and germinating over 80 per cent should be used for seeding.

After determining that a sample germinates satisfactorily, the seed should be cleaned and graded carefully to remove the lighter weight seed. It is possible to raise the test weight several pounds and still have enough of the heavier more plump seed available for planting. It may be necessary for you to do the cleaning in your elevator provided you are equipped to do this type of work. Make every effort to clean the cleaning machinery between each job so as to prevent admixture of grain.

Treating the seed properly with New Improved Ceresan may increase the germination of the seed approximately 15 per cent. You should learn how to treat the seed, what to use and the amount to use.

The barley situation is bad in certain localities particularly in Southern Minnesota and Northern North Dakota, where there was considerable scab and Gibberella present in 1935.

It is necessary therefore to make a vigorous survey of all possible sources of corn having the ability to germinate vigorously. These sources may include cribbed corn of 1934 and early maturing cribbed corn of the 1935 crop. Also some of the 1933 crop may be available and satisfactory. Some farmers are growing a very early type of corn which is sometimes referred to as "flinty." The corn matured early enough to be suitable for seed. This corn can be sorted out and used for seed.

A germination test is the only safe guide to satisfactory seed corn. The common rag doll method is a very effective method of making the germination test altho other methods may be used.

## California Takes Up Flaxseed

Flax plantings were inaugurated several years ago in the Imperial Valley of California and have spread rapidly to the more northern valleys. In 1934, 11,000 acres were harvested, the total production being 242,000 bushels. The yield per acre, it will be noticed, is enormous as compared with the annual averages for the United States.

In 1935, 38,000 acres were harvested and the production proved to be 570,000 bus. However, last season the weather was very dry at planting and a good deal of the flax put in the northern valleys was planted too late, so that many fields showed poor yields.

This year the estimates of acreage vary between 40,000 and 70,000. Recent reports indicate that the prospects are favorable, with the season two to three weeks earlier than last year. It is interesting to note that growers in California usually plant in November and harvest anywhere from April to June. This method follows the Argentine system of the long winter growing season. The type of seed produced in California is the Indian Punjab variety, giving a good quantity and quality of oil. —Archer-Daniels-Midland Co.

## Clarkan Wheat

Earl G. Clark has recently distributed a new variety of soft red winter wheat named Clarkan, which appears promising and which has no serious defects, so far as known.

Clarkan is probably the result of a field hybrid or natural cross between Blackhull and a beardless variety of soft red winter wheat, possibly Harvest Queen. In most tests at Manhattan and on the experiment fields in southeast and northeast Kansas this new variety of soft wheat has produced higher yields than Fulcaster and Harvest Queen, the standard sorts of soft wheat grown in eastern Kansas.

Clarkan has yielded about the same as Kawdale in most of these tests. Clarkan usually produces grain of high-test weight, resembling its Blackhull parent in this respect. Clarkan is a true soft wheat and as such will apparently suit the needs of millers who want to produce a soft wheat flour, suitable for biscuits, pastry and crackers.

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# Feedstuffs

**New York, N. Y.**—January receipts of millfeed were 116 tons, compared with 147 tons in January, 1935.

**Jamestown, N. Y.**—The annual meeting of the Mutual Millers & Feed Dealers Ass'n will be held here in September.

**San Francisco, Cal.**—January receipts of bran were 401 tons and of hay 360 tons, compared with bran 65 tons and hay 528, in January, 1935.

**Cincinnati, O.**—January receipts of feed were 510 tons and of hay 986 tons, compared with feed 660 tons and hay 396 tons in January, 1935.

**Philadelphia, Pa.**—Judge Kirkpatrick of the Federal Court on Feb. 17 enjoined Sec'y of Agriculture Wallace from carrying out his plan to license dealers in live poultry in Philadelphia, in a suit brought by 39 merchants.

**Fort Collins, Colo.**—H. B. Osland of the Animal Investigations department of the Colorado State College, is scheduled to analyze the results of protein and mineral supplement feeding of lambs on Lamb Feeders Day, Feb. 28.

**Sacramento, Cal.**—Since the last convention in April, 42 new members have joined the California Hay, Grain and Feed Dealers Ass'n. Members will be required to meet dues and other obligations under the new membership policy for 1935 adopted by the directors.

**Sacramento, Cal.**—Under the state feed law the state collects from approximately 3,675 licensed concerns the 4-cent tonnage tax of over \$51,000. In view of the income being greatly in excess of expectations, it is thought the tonnage taxes might be proportionately reduced.

**Sacramento, Cal.**—The directors of the California Hay, Grain and Feed Dealers Ass'n met at Los Angeles Feb. 7, and voted to hold the 12th annual convention at the Biltmore Hotel, Los Angeles, Apr. 23, 24 and 25. Harry N. Laino was appointed general convention chairman.—I. J. Stromnes, sec'y.

**St. Louis, Mo.**—January receipts of soybeans were 67,500 bus., compared with 25,500 bus. in January, 1935. Shipments during the same period were 100,500 bus., against 9,000 bus. in January, 1935. January receipts of hay were 624 tons, compared with 396 in the same period last year, and shipments were 300 tons, compared with 96 in January, 1935.—C. B. Rader, sec'y Merchants Exchange.

**Washington, D. C.**—Production of about 13,940 tons of distillers dried grains during January was the largest of the season and was about 770 tons over the large output during December. Shipments of 14,070 tons were also the largest of the season, and were about 1,110 tons over the December shipments. Stocks on hand at the close of the month of 1,420 tons were somewhat less than a month earlier.—U. S. Dept. of Agriculture.

**Washington, D. C.**—The number of horses declined over 2,000,000 and the number of mules declined by 535,790 in the last five years. The birth rate of both classes of draft animals, 3.6%, is far below the 7 to 8% required for replacement, based on an average life span of 14 years. The decrease in the number of horses invites the problem of what to do with the several millions of acres of land formerly used to grow feed for them.—Buro of the Census.

Taxes under the Kerr-Smith tobacco and Bankhead cotton acts are collectible prior to repeal, which is not retroactive, as is a court decision holding the acts invalid.

**Canada** will guarantee farmers 60 cents for pool wheat on the 1936 crop, Prime Minister Mackenzie King told the House of Commons Feb. 19. A bill will be introduced for 60 cents for No. 1 northern basis Ft. William.

**Benefit Payments** to farmers for wheat acreage adjustments have to be divided into two installments to conform with the contract and the law, one payment being made immediately and the other postponed.

## Insurance to Protect Accounts Discussed by Mutual Millers

The use of life insurance to protect charge feed accounts was strongly urged and widely discussed before the annual midwinter meeting of the Mutual Millers & Feed Dealers Ass'n held at Buffalo, N. Y., Feb. 6.

The plan presented by Geo. N. Schuster provided for issuance of an insurance policy on the life of the customer, this policy to be assigned to the feed dealer to cover all obligations, both secured and unsecured, of the customer to the dealer. The customer would be required to pay half of the gross premium each year the policy is in force, the dealer would advance the other half, first deducting all dividends credited to the policy.

To protect the dealer against premium advances the policy would be of the 20-year payment type, and written for at least twice the amount of the customer's account. If the customer's account was paid up he could borrow

# Announcing

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PACIFIC VEGETABLE OIL  
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Dept. FD-4



enough on the policy to repay the advances made by the dealer and take over the policy in full. This type of insurance would insure prompt payment of a customer's account in case of his death, and would leave additional funds to cover other obligations of the customer, or accrue to his estate.

PORTABLE MILL competition was considered on the decline. While at least six such mills are operating within 30 miles of Buffalo, and many more in other sections, few of the operators are able to lay up sufficient reserve to replace their grinders when worn out. Feed grinders and mixers, operating over regular delivery routes picking up grist one day and returning the ground feed on the following day, have successfully met portable mill competition.

A move for legislation that would invalidate fire insurance on farm buildings when a portable mill is operated in or near them has been started, but has been anticipated by mutual and co-operative farm insurance companies.

FEED DEALERS in New York state apply no fixed rule on quotations for delivered products, quantity or cash discounts, but expressed conviction that each firm should establish a consistent policy. Delivered prices were considered subject to the least misunderstanding.

RETAILERS' buying organizations, as now being tried in Minnesota, Wisconsin, and New England states, were not favorably considered, most delegates feeling individual middle men can do a better job of buying at less expense than an organization.

PRES. LIONEL TRUE, Springville, N. Y., reviewing his impressions from a meeting of the board of directors of the National Ass'n of Feed Ass'ns, felt that affiliation with the latter should be continued, and every effort made to keep the government out of business.

SOME MILLERS have been successful in winning the consent of power companies to elimination of demand meters, so that they pay only for power actually used. This has given savings as high as \$55 a month to mills. An effort to win a standard rate for all communities was advised.

An interesting development of the depression, said Quincy Adams, in an address before the gathering, is the accelerated trend toward research work in merchandising with emphasis on standard cost accounting.

## Feed Prices

The following table shows the closing bid price each week for April futures of standard bran and gray shorts, spot cottonseed meal, soybean oil meal and alfalfa meal in dollars per ton, and No. 2 yellow corn and No. 2 yellow soybeans, in cents per bushel.

	Minneapolis Spot		Kansas City	
	Bran	Midds	Bran	Shorts
Dec. 28	16.00	16.50	15.50	19.90
Jan. 4	16.25	16.50	15.25	19.75
Jan. 11	16.25	16.50	15.25	19.40
Jan. 18	15.50	15.75	15.50	19.60
Jan. 25	15.25	15.25	15.25	19.50
Feb. 1	15.00	15.50	15.00	18.80
Feb. 8	15.50	16.00	15.45	19.50
Feb. 15	15.50	16.00	16.00	20.00
Feb. 21	16.50	16.50	15.90	20.50

	St. Louis		Chicago, Soy	
	Bran	Shorts	Beans	Meal
Dec. 28	17.50	20.65	93	25.90
Jan. 4	17.40	20.75	93	26.40
Jan. 11	17.00	20.30	87	25.90
Jan. 18	17.50	20.60	85	25.40
Jan. 25	17.20	20.25	85	24.90
Feb. 1	16.65	19.65	84	24.40
Feb. 8	17.00	20.00	84	23.90
Feb. 15	17.30	20.50	84	24.00
Feb. 21	17.40	20.55	85	23.40

	Cottonseed Meal		Denver		Chicago
	Ft. Worth	Memphis	Alfalfa		
Dec. 28	25.50	22.00	21.00	60	
Jan. 4	25.50	22.00	21.00	62	
Jan. 11	25.00	21.50	21.00	61	
Jan. 18	24.50	21.50	21.00	61	
Jan. 25	23.50	21.00	21.00	61	
Feb. 1	23.50	20.50	21.00	61	
Feb. 8	23.50	20.50	21.00	61	
Feb. 15	23.50	20.50	21.00	62	
Feb. 21	24.00	21.50	21.00	62	

## More Protein for Young Turkeys

The turkey poult grows rapidly during the early weeks of its life and therefore can utilize a greater percentage of protein in the diet.

At Pennsylvania State College, poulters were allowed to choose their own food. During the first two weeks, they consumed 26 per cent of protein; from the fourth to eighteenth week, about 20 per cent; after which the protein consumption slowly declined to 15 per cent at 24 weeks of age.

Pennsylvania State recommends a mash containing 24 per cent protein to eight weeks of age, 19 per cent to twelve weeks of age, after which scratch grain is fed in conjunction with the 19 per cent mash.

Cornell University recommends the same practice.

Differences of opinion exists with regard to the protein level, for example, the University of Idaho recommends poult starting mashes containing 15.6 and 18.5 per cent of protein, while Professor Cline of the University of Nevada favors 28 per cent protein to six weeks of age, gradually lowered to 25 per cent at 12 weeks and 16 per cent at 24 weeks.

## A Feeding Comparison of Fish Meals

Flame dried and steam dried menhaden meal, cod and haddock meal, salmon meal, tuna, pilchard, crab, and shrimp meals, and meat scraps were compared in experiments at the Ohio station. The conclusions showed a great deal of variation in the feeding values, when fed to poultry on a 12 per cent protein basis as the only protein supplement.

Adding 5 per cent dried skimmilk to a fish meal and meat scraps ration gave improved growth, except in the cases of cod and haddock meal, and crab meal.

In a ration containing 5 per cent of dried skimmilk, replacing one-third of the meat scrap with fish meal caused a significant improvement in growth, but using a greater proportion of fish meal proved no added advantage. The combination of meat scrap, fish meal, and dried skimmilk was used more efficiently than meat scrap alone, regardless of whether or not dried skimmilk was used in combination with the meat scrap. Shell fish meals made the poorest showing of any of the fish meals.

## Ground Oats Substitute for Bran in Chick Ration

Economy sometimes advises the use of ground oats or wheat in place of wheat by-products, or in place of part of the corn in chick rations. Seven experiments on this subject at Purdue University in Indiana concluded:

When 30% of ground oats was substituted for 15% each of wheat bran and wheat middlings in the starting rations used, there were no important differences in the rate of growth, mortality, or amount of feed required to produce a unit of gain during the first eight to ten weeks.

Ground oats proved an efficient substitute for bran and middlings, regardless of whether the ration contained a combination of 12% meat and bone scraps and 4% dried buttermilk, skimmilk, or 15% meat and bone scraps and 5 or 6% dried skimmilk or dried buttermilk.

Finely ground oats were used in all of the experiments. Variations in the basal ration were made only in the oats vs. bran and middlings ingredients. Other ingredients included ground yellow corn, meat and bone scraps, dried buttermilk or dried skimmilk, alfalfa leaf meal and salt. Cod liver oil stearin, concentrated cod liver oil, and sardine oil were used in different lots to meet anti-rachitic requirements.

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## LACTO-PHYL vs. DRIED MILKS

Dried Milks, recognized for its feeding value due to the high digestibility of its proteins, the vitamins A and G, and the fine type of minerals. A product to replace milks should carry the same requirements.

Lacto-phyll, a product of the Syntha-Milk Laboratories, is this one product that carries a highly digestible protein content, vitamins A, G and B, and organic minerals of the highest type of digestibility.

Further—dried milks as such carry

no iron or iodine, two complementary substances most needed in any milk ration.

Lacto-phyll is built to meet that very definite need of the feed and mixing trade and without superfluous ingredients that bear no relation to milks, without inorganic minerals, or products of low food values.

Place Lacto-phyll under the most trying conditions, test it side of other so-called milk substitutes, judge Lacto-phyll strictly on results.

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4549 Produce Plaza  
Los Angeles, California



# Vitamin D in Poultry Feeding

By J. F. LYMAN of Ohio State University before Ohio Feed Dealers

The miserable failures, which, prior to the discovery of vitamin D, inevitably followed all attempts to raise chicks under conditions of indoor confinement, in contrast to the striking successes in growth and health of birds similarly handled, except that cod liver oil is included in the rations, is an impressive object lesson on the importance of vitamin D for the fowl. The only questions remaining are, how much vitamin D is needed and what are its most economical sources?

## What are the daily vitamin D needs of poultry?

Russell, at the New Jersey Experiment Station, found that the growing chick required from 4 to 20 units per 100 grams of ration for protection against leg weakness when sunshine was absent.

Lachat and Halvorson, at the Minnesota station, found that from 80 to 135 units were required for satisfactory calcification during a four weeks' period.

St. John and co-workers in Washington determined the vitamin D requirement for growth to be 17 units per 100 grams ration between the ages of 1 to 16 weeks. From 16 to 24 weeks, eight units per 100 grams ration were required. Between the ages of 6 and 24 weeks, sunshine alone, without vitamin D supplement, was sufficient. For egg production, without sunshine, 67 units per 100 grams ration were necessary; while for good hatchability, 135 units per 100 grams ration must be supplied. Winter sunshine had to be supplemented with 84 units per 100 grams ration, in order to have eggs of good hatchability. These are minimum values, and for cod liver oil of average vitamin D content, call for from about  $\frac{1}{4}$  to 1% of cod liver oil in the ration, as a whole.

Murphy, Hunter and Kandel, at Pennsylvania State College, using a highly active cod liver oil, containing 270 units per gram, found that 1-16% in the ration protected chicks against leg weakness; while  $\frac{1}{8}\%$  was needed for growth. They recommended at least  $\frac{1}{4}\%$  of cod liver oil of the strength used by them in the rations of growing chicks and laying hens. Each pullet requires about 25,000 units per year.

Graybill recommends that poultry mashes used in California contain 1% cod liver oil, since the activating effect of California sunshine upon the birds is insufficient to supply enough vitamin D for their needs.

Baird and Greene determined the vitamin D requirement for three species of birds. The chick, they found, requires 18 units per 100 grams of ration up to 12 weeks, when they should weigh 1,000 grams each. Young turkeys require 60 to 70 units per 100 grams ration up to 12 weeks, when they should weigh 1,900 grams each. Young pheasants require 50 to 60 units per 100 grams feed up to 12 weeks of age, when they should weigh 600 grams each.

Excessive amounts of cod liver oil cause damage in fowls as in rats. Titus and Nestler found that when cod liver oil makes up 8% of the ration, both egg production and hatchability were adversely affected. They recommend from 1 to 2% of the ration as best. When viosterol is used, 10 to 20 times as much in rat units is needed.

## What carriers of vitamin D are best for poultry?

Sunshine, with its ultraviolet rays, produces vitamin D in the comb and wattles of fowls, thus supplying them with the vitamin in proportion to the intensity and the duration of the irradiation. Tisdall and Brown report that at Toronto, Ont., the ultraviolet intensity between April and August is eight times that during November, December and

January. When the noonday altitude of the sun is 30 to 35 degrees or more, animals are protected. At Cleveland the noonday sun's altitude is below 35 degrees for about four months of the year; while at Cincinnati it is below 35 for about three months, with a minimum elevation of 27 degrees. Tonney, Sommers and Marti have shown that at Chicago the ultraviolet effectiveness of the sunshine is very low between November and March, inclusive. Thus it is apparent that over all of Ohio, winter sunshine is insufficient to furnish much vitamin D. Other sources of vitamin D must be used during these dark months.

Fish liver oils, fish liver meals, fish meals, irradiated ergosterol and irradiated yeast are concentrated sources of vitamin D, as judged on the basis of rat units. However, Waddell and others have obtained evidence that there are at least two forms of vitamin D. First, a vitamin D from the irradiation of a vegetable sterol, ergosterol; and, second, a vitamin D from an animal sterol of unknown character, but associated with cholesterol. The vitamin D of vegetable origin is relatively much less effective in chicks than in rats; while the vitamin D of animal origin is equally effective in rats and chicks. Other workers, notably Koch, have noted the relative ineffectiveness of irradiated ergosterol as a source of vitamin D for chicks.

Bills and associates tested a number of fish oils on rats and chicks and found no relation between the ratings obtained for the two species. For example, cod liver oil was given a rating of 100 rat units per gram and 100 chick units per gram. Halibut liver oil had a rating of 1,200 rat units and a little under 100 chick units. Bluefin tuna liver oil contained 40,000 units per gram by the rat test, but only 15 units by the chick test. It is very plain that the rat test cannot be depended upon as a measurement of vitamin D in poultry feeds.

Lachat and Halvorson have emphasized the importance of evaluating the vitamin D content of poultry feeds by the chick assay method. In a test of a large number of commercial vitamin D products, they found that many poultry cod liver oils were superior to the sample of cod liver oil used as reference standard in the tests. All the samples of cod liver oil tested produced a satisfactory bone ash in the test chicks when fed at the 1% level. Irradiated yeast products were ineffective at a 5% level. St. John reports that all the fish liver oils tested by him protected chicks when fed at the 1% level, but that some sardine and pilchard oil did not protect at the  $\frac{1}{2}\%$  level.

Russell, Taylor and Wilcox report that irradiated ergosterol is much less effective in chicks on the rat unit basis than is cod liver oil.

The information available at present indicates that cod liver oil is the most reliable and economical source of vitamin D for poultry rations.

The only ordinary grocery article that contains enough vitamin D to be of much consequence seems to be hens' eggs. Branion,

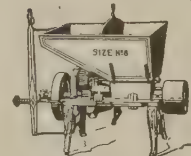
Drake and Tisdell report that pullets kept in sunshine at Guelph, Ont., produced eggs whose yolks contained 12 units vitamin D per gram. The addition of 1% of cod liver oil to the ration increased the vitamin D content of the egg yolk six to eight times; massive doses of viosterol increased the antirachitic vitamins of the eggs about 35 times; while small doses of viosterol were as effective as cod liver oil in raising the vitamin D content of the eggs. Irradiation of the hens with ultraviolet lights caused but a slight increase in the Vitamin D level of the eggs.

Bethke, Record and Wilder fed rations containing cod liver oil sufficient to supply 54, 540 and 5,400 units of vitamin D per 100 grams of ration. The vitamin D content of the eggs produced from the several rations was increased  $2\frac{1}{2}$ , 20 and 200 fold, respectively. Viosterol containing 540 and 5,400 rat units, added to each 100 grams of ration, increased the vitamin content of the eggs produced thereon 10 and 100 fold, respectively. Feeding 54,000 rat units of viosterol per 100 grams of ration produced a toxic effect upon the hens receiving it.

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If eggs can be made a reliable and concentrated source of vitamin D, as the experiments of Tisdall and of Bethke show they can, eggs will take a place in dietetics as an antirachitic agent approaching cod liver oil in potency and having many advantages over cod liver oil in general usefulness and in palatability.

## Synthetic Dried Milks Produce Results

The high price of dried and condensed skim milk and buttermilk was the center of one of the discussions at the annual midwinter meeting of the Mutual Millers & Feed Dealers Ass'n in Buffalo this year. The high prices for these well-liked feed ingredients has become a standard complaint among many poultry men, feeders, feed dealers, grinders and mixers. At the same time these prices have opened the way for substitute products that can be sold at equal or more reasonable prices when the substitutes have the ability to produce equal or better results.

This factor has undoubtedly contributed to the quick success of Syntha-Milk and Lacto-Phyl products of a company that started in business as recently as July 1, of last year, acquiring nearly 900 dealers in 14 states in less than 6 months. The Syntha-Milk Co. already has offices at Dayton, O., Baltimore, Md., and Los Angeles, Cal.

Advantages that Syntha-Milk and Lacto-Phyl offer the feed manufacturers and the grinders and mixers is that not only do they replace dried milks in every feeding respect, but they also supply iodine, iron, and other concentrates beneficially incorporated in feeds in smaller quantities than many dealers find it convenient to handle.

Lacto-Phyl replaces all milk products, iodine and iron. It contains dried milk albumen, dried skim milk, vacuum processed fish meal, processed blood flour, processed alfalfa plant, iron oxide, iodine, crab meal, aniseed, fenugreek and red dog flour. Not only does it contain a sufficiency of vitamin G, but it is heavily fortified with vitamin A and carries the same protein content as dried milk.

## Corn and Cob Meal

By H. A. HOPPER of Cornell

Unshelled corn is sometimes ground cob and all. The product is corn and cob meal. This practice, which avoids the trouble of shelling, has long been rather common in the corn belt. If energy rations only are wanted and a great variety of feeds not essential, the cob ground with the grain adds bulk and may make heavy corn feeding safer.

Some dairy farmers would like to use corn and cob meal in their rations but are not clear as to its feed value or how it may be safely fed. There is nothing harmful about corn and cob meal. One must remember, however, that it requires extra energy to digest the cob which, because of its low feeding value, tends to dilute or reduce the value of mixtures where it is included. This is shown in the following comparison:

	Dig.		Total	
	Protein	Fiber	Fat	Dig. Nutrients
No. 2 corn .....	7.1	2.2	3.9	80.6
Corn and cob meal ..	6.0	8.2	3.3	75.9
Corn cobs .....	0.4	31.8	0.4	48.1

Corn and cob meal should be recognized as a low protein energy feed relatively high in fiber and carrying less digestible protein than any of the other cereals and less total digestible nutrients than any except oats. To illustrate its use in a mixture, the following formula would be suitable to feed with mixed hay and corn silage where oats, barley and corn were available, namely: 400 corn and cob meal, 200 oats, 500 barley, 400 standard middlings, 200 corn distillers' grains and 300 soybean oil meal. This would contain 18 per cent of total protein and about 1500 lbs. of total digestible nutrients.

As the winter feeding period advances little change is noted in the price of ingredients. If the supply of home-grown feed is getting lower, this will mean the purchase of more supplies. At current prices, however, a good mixture can be made from feeds in the group supplying total digestible nutrients cheapest as follows: 500 hominy, 400 barley, 500 corn distillers' dried grains, 400 middlings, 100 coconut oil meal, and 100 soybean oil meal.

## Pacific N-W Feed Men Meet

JOHN LEHMANN, Everett, Washington, was named President of the Pacific Northwest Feed Ass'n, at its eighth annual convention held in Seattle Feb. 21-22.

Other officers named to serve with him during the 1936-37 period were Ralph Johnstone, Tacoma, vice-pres.; Charles R. Walters, Sec'y-Treas., Bothell, Wash. Floyd Oles, perpetual manager, was reelected.

HUGH CLARK, retiring sec'y, was given a hearty vote of thanks for his long and efficient handling of the position by the 165 members of the association present. This was by far the largest turn out of the feed and milling industry for many years.

In his brief remarks, Mr. Clark stated that the Ass'n now has a reserve fund for the first time, that it is in excellent condition, and in turn congratulated Mr. Oles for the results obtained by the industry in the State of Washington during his handling of the many problems.

The following resolutions were submitted and unanimously passed:

### Resolutions Adopted

That thanks be extended to the Tax Commission of the state, for their very fair and just mode of taxation of the industry during the past year.

The officers were thanked for their efforts. That the Ass'n go on record in favor of the present fertilizer laws, and the hope that they will continue with the same ones.

That the present Commission Merchants Laws can be bettered, and that the ass'n go on record as favoring the continuance of a live trade practices committee.

On account of the death of Earl Edminton, one of the prominent feed dealers, during the past year, it was moved and passed that the Ass'n send a letter of regrets.

PRESIDENT GOULD, in his annual message, stressed the point that the dealers using fair and business-like methods were the ones who would survive the present strenuous times. He urged that each dealer be proud of his business and do all possible to raise standards, and that each must realize that he has a big job to do.

CHAS. L. SMITH, mayor of Seattle, gave the feed dealers a warm welcome to the Queen City. He lauded the organization and the co-operative spirit of the Ass'n, and urged the members to put in their best efforts towards its future advancement.

PROF. J. S. CARVER, Department of Poultry Husbandry, State College of Washington, with the assistance of charts, gave the Protein Requirements of Laying Hens, in which he stressed that feeding has a great bearing on hatchability, egg production and quality.

D. C. BOTTING, Manager, Federated Industries of Washington, gave a lengthy report on the ramifications of the Unemployment Insurance and the Federal Security Act. He urged that the dealers keep a careful card-index record of each and every employee and their work and amount of remuneration received.

DR. ROBERT PRIOR, State Supervisor of Dairy and Livestock, gave an address on "The Quarantine on Bang's Disease," and stressed that the affected animals should be most carefully watched and kept separated from the balance of the herd.

In the absence of Ernie W. Fry from Ellensburg to tell his annual story, F. K. Haskell of Portland gave a couple that held the crowd.

FLOYD OLES, for a number of years past gave a brief but comprehensive review of his stewardship, stressing the value of the associa-

tion to the members, the solid foundation upon which the Association now rests and a brief preview of the anticipated happenings in the trade during 1936.

He cited the high lights of the legislative battles of the trade, both state and national, and the fact that the industry in the state had been exempted from a retail sales tax. Briefly the Manager touched on the various Codes, and all of which is now history—mostly sad. That the Ass'n still should continue its fight for more effective legislation, and a Feed Control Committee.

The trade papers were lauded for the consistent efforts to help the trade and publicize the happenings. He regretted the fact that the Fertilizer trade is not as well organized as it should be. He was gratified with the splendid increase in membership.

JOHN LEHMANN gave a most satisfactory report as Chairman of the Hay Committee. Winlock Miller, Jr., Sec'y Washington State Taxpayers' Ass'n, outlined the work of his association, following which was an open forum on this important subject.

Elected on the Board of Governors were: Carl Arvidson, Central Washington, Ellensburg; R. Johnstone, Tacoma District, Tacoma; H. A. Conlee, Inland Empire, Spokane; John Lehmann, Skagit, Everett.

It was with much regret that the Ass'n received the news that George Lilly of Washington, D. C., had missed his plane. He was to have given the address, "The Trade Association's Task and Future."

The convention ended with the annual banquet put on under the supervision of Carl Smith and his entertainment committee.

On Washington's Birthday many stayed over to brush up on the golf games.

Plaques were presented to all past Presidents of the Ass'n.

Numerous door prizes swelled the attendance.

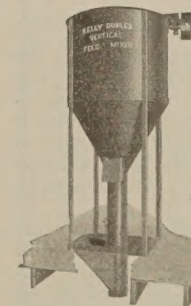
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# Nutritive Values of Dried Skim Milk

A study to determine the effect on skim milk, with particular reference to the protein constituents, of drying at different temperatures and by different commercial processes has been made by the Illinois Agricultural Experiment Station.

Briefly, it was found that the value of dried skim-milk powder as a source of fuel for the animal body is not diminished during commercial drying until it is very obviously scorched, but its value as a source of protein is much less stable. While it is possible to dry raw liquid skim-milk without a significant decrease in the digestibility of the proteins or in the utilization of the absorbed protein in metabolism, as measured by the biological value, this ideal is not always attained in present-day commercial operations. No considerable lowering of the digestibility of the milk proteins occurs until evident scorching results, while the biological value is adversely affected in the ordinary roller-drying process and by preheating in spray-process drying, a process that yields what is commonly considered a choice grade of skim-milk powder. If the drying process accidentally or otherwise produces a scorched powder, the protein value of the powder may be lowered by 25 to 30 per cent. The spray process of drying is less liable to cause protein destruction than is the roller process.

The initial stages of the destruction of milk protein during drying on steam rollers involves a destruction of the amino-acid cystine, while the latter stages involve a more rapid destruction of lysine than of cystine.

During the study six samples of dried skim-milk powder prepared at different temperatures and by different commercial processes from the same lot of fresh milk were tested in feeding and metabolism experiments on young growing rats. The samples were prepared from an ordinary day's run of milk at a commercial plant located in Massena, New York. This plant was selected because it is the only one known to be equipped with apparatus for the production of dried skim-milk by the atmospheric roller process and by the spray process. These dry-milk samples were compared with raw liquid skim-milk.

The seven samples may be briefly described as follows:

1. Raw liquid skim milk drawn before any heat had been applied.
2. Steam pressure within the roll, 50 pounds, and the milk film slightly thinner than in ordinary practice. This sample was dried at a temperature as low as was considered practicable.
3. Steam pressure, 87 pounds, and the milk film of ordinary thickness. This sample represented a choice commercial dried skim milk for animal feeding.
4. Steam pressure, 90 pounds, and the milk film thinner than usual. This was a light scorched product, slightly darker in color and possessing a scorched flavor.
5. Steam pressure, 90 pounds, thin milk film on rolls, and scraping knives lifted intermittently to permit more than one revolution of milk solids on the rolls. This product was distinctly scorched.
6. Spray process with the skim milk not preheated.
7. Spray process with the skim milk preheated.

It was first discovered in paired-feeding experiments that the net energy value of the scorched-roller powder in Sample 5 was not appreciably different from that of the 50-pound-pressure-roller powder in Sample 2. Hence it appears that the severest heating employed in the preparation of these samples did not cause any appreciable deterioration of the skim-milk as a source of food energy.

The investigation of the protein constituents of raw liquid skim milk and the skim-milk powders has yielded the average digestion coefficients and biological values collected in the table herewith. The coefficients of digestibility have been corrected for the metabolic nitrogen in the feces. They indicate that no considerable lowering in the digestibility of the protein of skim-milk occurs unless the solids are quite

severely scorched during the drying process. However, the biological values, measuring the percentages of the absorbed protein used for the growth and repair of body tissues, tell a different story. The biological value for the raw

Sample	Coefficient of true digestibility Pct.	Biological value Pct.	Relative protein value Pct.
Raw liquid skim milk...	95	90	100
Roller process—			
50-pound pressure....	91	89	95
Choice commercial....	93	82	89
Slightly scorched....	89	68	71
Scorched.....	81	70	66
Spray process—			
Not preheated.....	92	88	95
Preheated.....	95	82	91

liquid skim-milk is of particular interest, as this is the first time that such a value for this product has been ascertained. The true digestibility of the protein of fresh skim-milk was found to be 95 and its biological value 90. The 50-pound-pressure-roller sample and the non-preheated spray-process powder, both in the digestibility and in the biological value of their proteins, are statistically equivalent to similar values for fresh skim-milk. A significant drop in nutritive value occurs in the preparation of choice commercial dry skim-milk, while a slight scorching of the product during drying occasions a further and more marked protein deterioration. The "relative protein values" given in the last column of the table are combinations of the measures of digestibility and biological value of the proteins and are expressed in percentages, taking the value for the raw liquid skim-milk as 100. From these values it appears that in the ordinary preparation of skim-milk powder by the roller process an 11% reduction in protein value occurs, while a slight scorching of the product may bring about a 30% reduction.

Some light has been thrown upon the destructive changes in the protein constituents of skim-milk during these various drying processes by studies of the amino acids limiting the nutritive value of some of the samples. It is known that in fresh milk a deficiency of cystine, a sulfur-containing amino acid, limits the utilization of the protein, the biological value of which cannot be increased except by the provision of

more cystine. In agreement with this fact it was found that the 50-pound-pressure-roller sample was deficient in cystine. Furthermore in earlier work from the laboratory it has been proved that a choice commercial skim-milk powder (spray process) is also deficient in cystine, so that evidently the initial stages in the heat deterioration of milk protein involve a destruction of cystine. In the scorched-roller and slightly scorched-roller samples, however, cystine was no longer deficient. The deficiency in these cases was in another amino acid indispensable for life, namely, lysine. Evidently the later stages of protein destruction involve a more rapid destruction of lysine than of cystine. This fact is of more than passing importance, since the value of milk proteins in supplementing the proteins of the cereal grains is probably the result of the deficiency of the latter in lysine and to the presence in the former of abundant proportions of this amino acid. Hence scorched skim-milk powder would not possess this supplementary capacity.

## Ohio Soybean Plant

The Old Fort Mills, Inc., has erected a plant at Marion, O., for the processing of soybeans with equipment of the most modern type, making it possible to produce meal of any texture or color desired.

The expellers are of the New French type having a screw press and are steel jacketed.

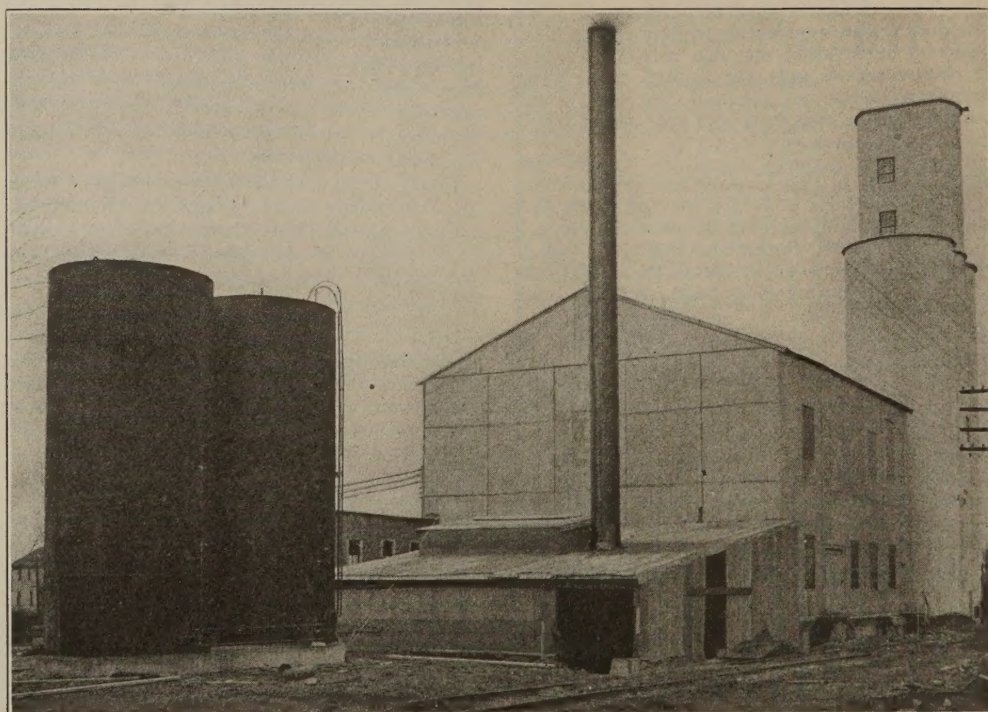
The flow of material thru the plant begins with transfer from the storage elevator to a bin in the production plant holding the daily run. The beans go thru cracker rolls that are two pair high, and then to driers on the second floor, reducing the moisture to less than 4 per cent.

After passing thru a tempering bin the cracked beans are ready for the principal operation in the expeller that squeezes out the oil.

Cake from the expeller goes thru a cake breaker and grinder and then into the storage bin. The oil goes into a pre-coat tank and from the tank to the filter press and then into the storage tanks.

The plant has a capacity of 1,500 bus. a day and is operating 24 hours a day seven days a week. The output is a meal with 41 per cent protein.

In the engravings herewith are shown the plant and a group of employees and office staff.



Oil Tanks, Processing Plant and Concrete Elevator of Old Fort Mills, Marion, O. [See facing page.]



## Beet By-Product Rations

An experiment with fattening 80 steers was conducted in 1935 by the Colorado Exp. Station at Ft. Collins to determine the value of additions to standard beet by-product rations, the large beet sugar factories of that state producing considerable by-products.

**Wet Beet Pulp** was hauled directly from the local sugar factory to the steers as needed. The cost of the pulp fed was 92 cents at the factory. To this was added a 40-cent per ton hauling charge and also a 1.4 per cent shrinkage worth 1.3 cents per ton, making a total of \$1.34 per ton of wet pulp fed to the cattle. The average moisture content of the pulp was 89.47 per cent.

**Corn** used was No. 1 recleaned shipped-in Nebraska grain. It weighed 56.8 pounds per bushel and averaged 12.57 per cent moisture thruout the feeding test. All corn fed was ground medium-fine.

**Barley**, grown locally and weighing 47.0 pounds, was used in this test. It was graded No. 2 according to U. S. Standard and had an average moisture content of 11.04 per cent during the feeding period. All barley was finely ground.

**Cottonseed Cake** had a guaranteed analysis of 43 per cent protein, and the average moisture content was 7.93 per cent. Pea-sized cake was fed to the steers.

The steers were started on 1 pound of grain per head daily and gradually increased to 8 or 9 pounds, depending on the amount of cake fed. Cake was started at 0.1 pound per head per day but increased quite rapidly to a specified amount in the various rations. Wet beet pulp was fed as heavily as the steers would consume it, and until 40 pounds per head per day was reached.

It was found that addition of high calcium carbonate limestone to a standard beet by-product ration composed of grain, cake, wet beet pulp, and alfalfa hay, gave no beneficial results.

Oat straw supplemented with limestone can be substituted for alfalfa hay in a beet by-product ration. The rate of gain will be lessened but the feed cost per unit of gain will also be lower.

Unless beef and feed prices are very low, 1½ or 2 pounds of cottonseed cake are more economical than 1 pound in a ration composed of grain, wet beet pulp, and oat straw. The heavier cake feeding increases rate of gain, lowers feed cost per unit of gain, produces more finish, and increases selling price.

Cane fodder supplemented with limestone showed a greater feed replacement value than alfalfa in a standard beet by-product ration.

When cane fodder is substituted for alfalfa in a standard beet by-product ration, it is better to increase the cake allowance from 1 pound to 2 pounds, since it produces greater gain, cheaper gain, and more finish. However, with prices of beef and home-grown feed extremely low,

1 pound of cake must be considered most economical, as shown in the 1934 experiment.

During drought years it is advisable to feed alfalfa as part of the dry roughage ration when either cane or straw is used.

The percentage waste, where whole cane was fed, was not great enough to necessitate grinding medium-to-fine stalked cane fodder for cattle.

Oat straw, a carbonaceous roughage very low in protein, must be supplemented with cottonseed cake or some other protein-rich feed when it replaces alfalfa hay in a standard beet by-product ration. In order to determine the most economical amount of cake needed, varying amounts of cake were fed in lots 3, 4, and 5. The first year's test, when all feeds were extremely cheap, indicated that 1 pound of cake was most economical unless there existed a greater selling price margin for added condition carried by steers fed greater amounts of cake. This year's experiment again brings out the fact that increasing the amount of cake in a straw ration increases gain (14.9 pounds and 15.4 pounds, respectively) and apparently improves condition to such an extent that steers fed greater amounts of cake than 1 pound per head per day command a higher selling price, making cash outlay for cake justifiable. Lot 3, fed 1 pound of cake, sold for \$10.70 per cwt.; lot 4, fed 1½ pounds of cake, brought \$10.90 per cwt.; lot 5, fed 2 pounds of cake, sold for \$11.00 per cwt.

## Variation in Fish Meal Proteins

The effect of method of manufacture on the composition of haddock fish-meal proteins has been studied by the Bureau of Fisheries of the U. S. Dept. of Commerce and reported on in Investigational Report No. 31.

The investigation has shown that there are three general conditions encountered in the manufacture of nonoily fish meal which have effect on the composition of their proteins. These are (1) difference in the proportion of head and backbone wastes, (2) the removal of water-soluble protein material by the wet process, and (3) method of drying.

The backbone portion of haddock-fillet waste has a larger percentage of protein than the head portion of the waste, and the proteins of the backbone material contain higher percentages of tyrosine and tryptophane. Thus variations in the proportion of head to backbone material will not only give meals of different protein content but proteins of different amino-acid composition. Meals containing the greater proportion of backbone waste will have a higher protein content and, because of the higher tyrosine and tryptophane percentages in the protein, should have higher biological values.

The water-soluble proteins removed by the wet process are relatively devoid of tyrosine, tryptophane and cystine. The wet process therefore yields meals of lower protein content, but the protein of such meals has a slightly higher percentage of the three essential amino

acids being considered. The proteins of wet-process meals might be expected to show slightly higher biological values than the proteins of dry-process meals.

Drying causes a diminution of cystine if the meals are heated much over 100 deg. F. Tryptophane apparently is affected by drying temperature also, but to a lesser extent. Tyrosine is probably not affected at all, unless extreme temperature conditions are encountered. Because of the apparent effect on cystine and tryptophane, fish-meal proteins would be expected to be of slightly lower quality than the original protein in the raw material. The relative diminution of the three amino acids, caused by the various methods of drying, however, would indicate that appreciable difference in protein quality should not be expected unless rather extreme conditions of drying are encountered.

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Part I is devoted to the principles of feeding, explains which elements have been found essential in feeding poultry and tells why certain combinations are made. Every grain or feed-stuff used for poultry is discussed in Part II. Rations for every class of poultry keepers are included in Part III.

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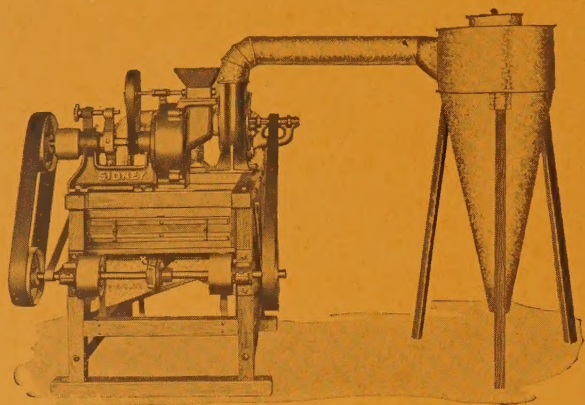
332 S. La Salle St. Chicago, Ill.



Pete Turner and Gus Holland with Staff of Ohio Soybean Plant.  
[See facing page]

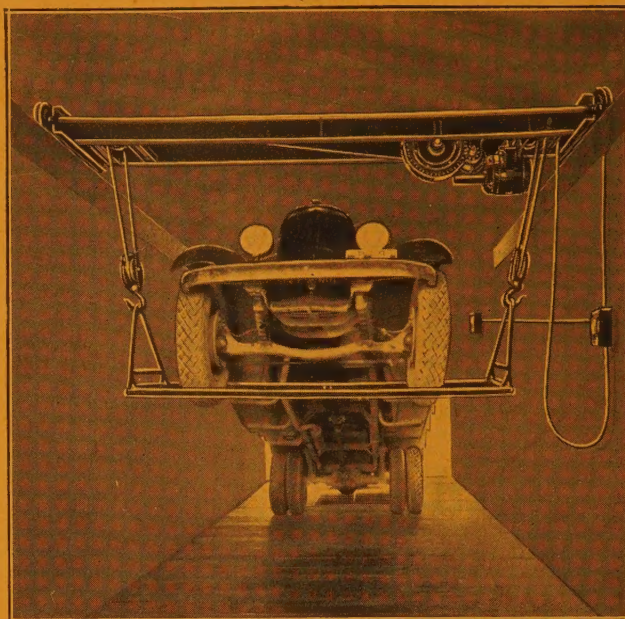


## SIDNEY Improved Corn Cracker



Every custom grinder and mixer of feed can materially increase his business if his plant is equipped with an efficient corn cracker and grader. It is easy to build up a demand for its product. The Sidney Corn Cracker and Grader is the latest advance in this type of equipment. Ask us for detailed information.

**Sidney Grain Machinery Co.**  
SIDNEY, OHIO

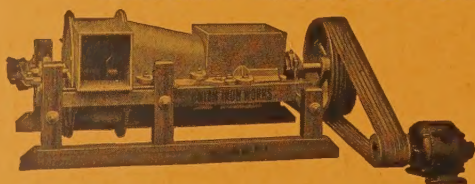


## BENDER ELECTRIC LIFT

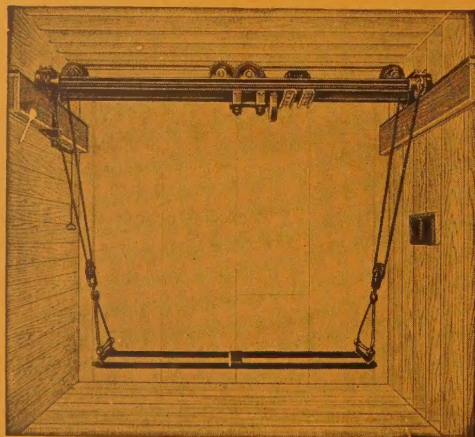
For every type elevator, high or low driveway. Will dump any size truck or wagon in one or more pits. All steel construction, electric welded. Self-locking worm drive with 2 H.P. geared motor. Shipped completely assembled. Simple and inexpensive installation. Write for full description.

**BENDER HOIST MFG. CO.**  
OMAHA, NEBRASKA

## WESTERN — GRAIN ELEVATOR EQUIPMENT —



Western Pitless Sheller with Cog Belt Drive



Overhead Electric Truck Dump

**UNION IRON WORKS**

## NEW

The **ELECTRIC MANLIFT** takes its place alongside our Electric Truck Hoist and Motor Driven Corn Sheller.

*Write us for complete information and prices.*

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ILLINOIS**

